



University of Victoria Satellite Design Team

Sponsorship package 2015

WHO WE ARE

UVic ECOSat is a student-run group who has competed in the **Canadian Satellite Design Challenge** (CSDC) hosted by Geocentrix Technologies for the past four years. The group is supported by prominent market partners Boeing, MDA Space, Advanced Robotics, and UrtheCast. Every two years, the CSDC invites 12 universities from across Canada to compete to **design a cube satellite and its mission**. The competition promotes the development of small satellite infrastructure - the satellite must measure 10x10x34 cm with a mass less than 4 kg - as well as knowledge and research into the practical and commercial applications of nanosatellite technologies in Canada.

UVic ECOSat is comprised of a diverse group of graduate and undergraduate students who are passionate about space technology and technological innovation in general. In 2014, ECOSat-II proudly **achieved first place in round 2 of the CSDC, securing a launch into Earth's orbit**. We are now in round 3 developing a new satellite that will hopefully also join ECOSat-II in orbit one day.

Rather than purchasing existing hardware and adopting third party software, the command and data handling systems, mechanical construction, payload development, and power system have been **designed and developed primarily in-house** at the University of Victoria, further distinguishing the project's achievements. It is imperative that the University of Victoria is able to facilitate the finalization of research projects, in order to maintain and further pursue its position at the leading edge of Canadian development, and as an academic hub of western Canada.

As well as working on the satellite, we will be putting on a multitude of presentations and educational seminars with local schools, companies and the public to help spread general space and satellite knowledge, and to publicize our team. **We hope groups such as yours think this project is as unique, interesting, and valuable as we do.**

Our Mission

Hyperspectral Imaging of Canada

Remote sensing is an emerging technology that can help researchers and industries track large scale geological trends. The camera uses the same concept as a

a spectrometer but can image large swaths of land at a time. Our proposed camera will image all of Canada in about 10 days.

The camera we are looking at will image from 400-1000nm and divide it up into 40 spectral bands. Each band can be used for different applications. Generally, this range of wavelengths can be broken up into 4 different spectrums.

- Blue, 450-520nm; Used for atmosphere and deep water imaging, up to 50m
- Green, 515-600nm; Used for vegetation and water imaging, up to 30m
- Red, 600-690nm; Used for man made objects, soil and shallow water, up to 9m
- Near-Infrared, 750-900nm; Used primarily for vegetation

Dividing these spectrums up further can help identify more specific geological characteristics. Some uses in Canada can be tracking the tree line in the north, analyzing the pine beetle infestation, evaluate moisture content surrounding forest fires to determine most at risk areas and much more. We will offer open source data to researchers and industries to help promote a more in depth understanding of our environment.

Sponsorship Details

Your sponsorship is the only way our team can achieve its goals, but sponsorship should be a two way street. Besides directly reaching the most motivated students who will one day want to find careers in the industry, we are happy to promote your company's involvement on any occasions possible. This has included local and national news coverage, an image on our website (www.ecosat.ca), and other perks listed below that will receive exposure throughout the local, engineering, and aerospace communities. If you wish to donate as a charitable donation, we are happy to provide a tax receipt, though we cannot advertise you as a sponsor. Otherwise, please see this list of sponsorship options and incentives:

Exposure	Title	Platinum	Gold	Silver	Bronze
Amount	\$25,000	\$10,000	\$5,000	\$2,000	\$500
Website logo	Main	Prominent	Visible	Listed	Listed
Company Description under website logo	Long	Medium	Brief		
Product endorsement on social media	✓	✓	✓	✓	
Distribution of promotional material	✓	✓	✓	✓	
Acknowledgement during events & presentations	First	✓	✓	✓	
Acknowledgement during news coverage	✓	✓			
Logo displayed on our presentation board	Prominent	✓	✓		
Logo displayed on Space Patch	✓				
3D printed model of satellite (monetary donation)	✓	✓	✓		
Sticker on flight case	✓	✓	✓		

Dear Sir/Madam,

The University of Victoria's ECOSat team is comprised of motivated students who are involved in a unique opportunity to design and build a nano-satellite in the framework of aCanada Satellite Design Challenge (www.geocentrix.ca/CSDC/). This competition is a pioneering effort in Canada. The students are currently carrying out the design and development of an Environmental and Communications nano-satellite and have committed numerous volunteer hours over and above their full time studies in order to bring their idea sand creations to fruitful completion. The University of Victoria and the graduate and undergraduate students will be very grateful if your organization would consider sponsoring the UVic ECOSat Student Team and contribute to the development of Space Sciences and Technology in B.C. and in Canada. The sponsorship funds will be used to purchase certified hardware and software components for space applications.

Sincerely,

Dr. Afzul Suleman

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