

## CWSF 2011 - Toronto, Ontario



### Sierra Robertson-Roper, Yvonne Alama

#### WAAS With the GPS?

**Challenge:** Discovery

**Category:** Junior

**Region:** Bay Area

**City:** Hamilton, ON

**School:** Dalewood Senior E.S.

**Abstract:** The purpose of our project is to find out if our satellites are affected by geomagnetic storms. We used a handheld GPS receiver to monitor solar activity by comparing WAAS and normal readings with NASA data obtained from observatories and from GOES readings. WAAS corrects normal mode and GOES are 2 satellites that measure the strength of our geomagnetic field at far distances from Earth.

#### Biographies

Sierra - At age 13 Sierra Robertson- Roper currently attends grade 8 at Dalewood Middle School in Hamilton, On. Her hobbies include reading, riding rollercoasters, writing, and swimming in lakes and wearing hats. In the future she hopes to become a milliner, an author or a journalist in hopes of presenting radical and interesting perspectives on current issues, which she works hard to aid in. Some of her latest doings being... bringing pink shirt day (an anti-bullying initiative) to her school, and raising money to help local children living in poverty. She finds political and other controversial issues very interesting, and keeps up to date by watchin...

Yvonne - I was born in Hamilton, Ontario. I'm thirteen and a half years old, my first language is French, and I love to travel around the world and to discover new countries. I've spend a total of three years in France, Paris. My favorite hobby is to play musical instruments. I play music each day after school (trumpet and piano). Finally, I enjoy learning about science and new Math theorems.

Youth Science Canada  
PO Box 297  
Pickering ON L1V 2R4  
[www.youthscience.ca](http://www.youthscience.ca) / [info@youthscience.ca](mailto:info@youthscience.ca)  
416-341-0040