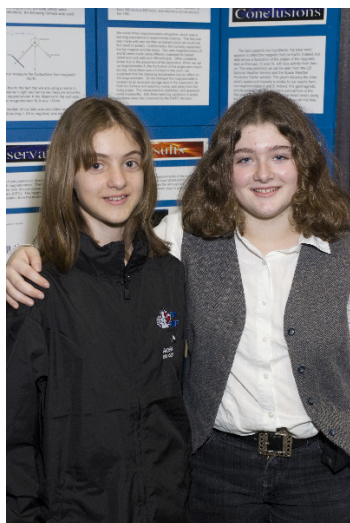


# CWSF 2009 - Winnipeg, Manitoba



## Emily Agar, Sylvie Bronsard

### Which Way is North?

**Division:** International / None

**Category:** Junior

**Region:** Bay Area

**City:** Dundas, ON, Hamilton, ON

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

**Abstract:** Our purpose is to discover if the Earth's magnetic field's movements are related to solar activity. We calculated the changes in angle of the magnetic north over a time period, using magnetometers built at home. We compared our experimental results with satellite data measuring solar activity and we concluded that solar activity has an effect on the Earth's magnetic field.

### Biographies

Emily - My name is Emily Agar. I was born in Toronto and moved to the Hamilton area in 2004. I am in Grade 8 French Immersion at Dalewood Middle School in Hamilton. I am looking forward to attending high school at Westdale Secondary School. I have an interest in languages (particularly Latin and Spanish) and art. Some of my favorite activities are orienteering, cross-country and downhill skiing, as well as swimming and rock-climbing. I really enjoy photography. I have taken piano lessons for four years. I can also play the clarinet and I have just started to learn how to play the guitar. I love animals and I would like to be a naturalist or an animal...

Sylvie - I was born in Hamilton, ON, on December 13th, 1995. My first language is French, but I am fully bilingual. I am in the French immersion program, in 8th grade, and I will be going to Westdale High School next year. I play three instruments: piano, violin and clarinet. I play in the senior band and senior jazz in my school, and I help with junior band. I am on my school's swimming, senior basketball and softball teams, and I swim twice a week with GHAC (Golden Horseshoe Aquatics Club). I am very interested in Greek and Roman mythology and history, and I love nature. Trees interest me a lot, as well as oceans and other bodies of water, and I've ...

### Awards

### Value

The University of Western Ontario Scholarship Bronze Medallist - \$1000 Entrance Scholarship Sponsor: University of Western Ontario	\$1 000
Bronze Medal - Physical & Mathematical Sciences - Junior Sponsor: Encana Corporation	\$300
Total	\$1 300