

# CWSF 2005 - Vancouver, British Columbia



## Sarah McCuskee

### Where Under the Sun Are You?

**Division:** Physical & Mathematical Sciences

**Category:** Junior

**Region:** Regina

**City:** Regina, SK

**School:** Dr. A. E. Perry

**Abstract:** It is suspected that solar wind and the ionosphere affect GPS positional accuracy. Data were collected on the ionosphere using radio propagation, on solar wind using websites, and on a GPS receiver. It was found that solar wind significantly affects GPS accuracy. Further work is recommended to ensure public safety.

Awards	Value
The University of Western Ontario Scholarship Silver Medallist - \$1500 Entrance Scholarship Sponsor: University of Western Ontario	\$1 500
Silver Medal - Automotive - Junior Sponsor: AUTO21	\$700
Silver Medal - Physical & Mathematical Sciences - Junior Sponsor: Encana Corporation	\$700
<b>Total</b>	<b>\$2 900</b>