

Ken Chilton Prize - Holly Ayles (New Brunswick)

It is with great pleasure and pride that, on behalf of the New Brunswick Centre Council, we submit the following nomination to the RASC National Awards Committee.

The Chilton Prize is awarded to an amateur astronomer, resident in Canada, in recognition of a significant piece of astronomical work carried out or published during the year. The New Brunswick Centre has a member we believe qualifies admirably for the award. Holly Ayles is a 14-year old student at École Sainte-Anne in Fredericton, New Brunswick and a member of our centre's Education Committee. Her activities in astronomy began with a shared interest with her father. In the winter of 2011 she began a project, Does Light Pollution Exist in the Village of New Maryland?, using the RASC's Sky Quality Meter. Measurements were taken throughout the village of New Maryland during January along with data on the number of street lights within the vicinity, visibility and weather conditions, all of which were plotted on a graph. In addition, GPS coordinates were taken at each location. The coordinates and readings were charted on an interactive Google Map of the village such that, when you click on a coordinate, you see the specific SQM reading and other information and how they compare with other observations in the area. An average SQM for the village was calculated to be 18.33. The village has seven subdivisions and the average SQM for them ranged from 19.13 to 17.79.

Holly presented her project at the Bliss Carmen Middle School Science Fair, where she won first place.

Next, the project was again given first place honours at the School District 18 Science Fair, in Fredericton. Finally, the project won a Bronze medal at the River Valley Science Fair, hosted by Science East and the University of New Brunswick on May 19, 2011. Unlike most science fair projects, it did not end by not moving on to the national competition. Instead, she and a friend transformed it into a poster project, La Pollution Lumineuse (Light Pollution), Originally submitted in French, for a Statistics Canada contest. For this, Holly won first place in the provincial and national contests and her poster was then to travel to the International Statistical Literacy Project – Poster Competition 2010-2011 in Dublin, Ireland. For this poster project the International Statistical Institute awarded her first place for the ages 12-15 category!

Holly Ayles is a bright young student that the New Brunswick Centre is very proud to include among its membership. Holly has shown just how much can be accomplished by our youth and her achievements bring us all tremendous pleasure. We feel that it is the duty of societies such as ours to formally recognize talent such as Holly has shown. Therefore, we are pleased to nominate Holly Ayles as a worthy recipient of the Ken Chilton Prize.

Sincerely,

Paul Gray

Curt Nason

On behalf of the New Brunswick Centre Council