



AURORAMAX

Yellowknife, Canada

AURORAMAX INFORMATION SHEET

The AuroraMAX project is a five-year educational and public outreach initiative that will monitor the intensity and frequency of the aurora borealis above Yellowknife, Northwest Territories, during Solar Maximum, the most active period in the 11-year sunspot cycle (expected in 2013).

Sunspots (regions of intense magnetic activity that form cooler, dark patches on the Sun's surface) release powerful bursts of solar wind that lead to vivid, brilliant auroras on Earth. Through the development of strong northern and national partnerships, as well as a commitment to observation, outreach and science, AuroraMAX will enhance our understanding of the relationship between activity on the Sun and auroral activity on Earth.

OBSERVATION AuroraMAX features an online observatory that will provide Canadians with instant access to colour images of the northern lights above Yellowknife, Northwest Territories—a prime location for aurora observation in Canada.

OUTREACH Northern and national outreach initiatives will provide informative and interactive learning experiences for aurora watchers of all ages. Colour images of the northern lights collected at Yellowknife will be the foundation of AuroraMAX outreach.

SCIENCE The AuroraMAX Project will enhance the Canadian Space Agency's contribution to the research on the northern lights by collecting data of aurora substorms using innovative aurora camera technology, developed by the University of Calgary. Led by space physicist Eric Donovan, the University of Calgary will provide scientific and technical support for AuroraMAX.

PARTNERS & OBJECTIVES Through the collaboration of the Canadian Space Agency, Astronomy North, the City of Yellowknife and the University of Calgary, AuroraMAX aims to:

1. Raise awareness of the science of the northern lights; and
2. Enhance public access to aurora observation in the North and across Canada.



Astronomy North





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AURORAMAX OPPORTUNITIES

Through its national observation, outreach and science objectives, AuroraMAX will also lead to new education, science, and tourism opportunities. As part of a northern and national outreach program, AuroraMAX images and movies will present a global audience with educational and experiential opportunities related to Canada's northern lights.

EDUCATION

AuroraMAX will engage students and teachers using educational modules and interactive tools that promote participation and awareness related to the science and culture of the northern lights.

SCIENCE

AuroraMAX data, including colour images and movie clips, will be used by scientists around the world to advance research on the aurora.

TOURISM

Colour images and movie clips produced by the AuroraMAX Online Observatory will be available for northern tourism associations to captivate potential audiences and brand Yellowknife as a premier destination to view the aurora.

NORTHERN CONNECTIONS

Astronomy North will be responsible for coordinating northern opportunities that align with national outreach objectives. As the host community, the City of Yellowknife will work to maximize tourism opportunities that result from the heightened awareness of the aurora.

NATIONAL CONNECTIONS

The AuroraMAX Online Observatory will provide Canada and the world with instant access to the northern sky and the greatest light show on Earth. Led by the Canadian Space Agency, national outreach will include the development of interactive tools and educational activities that will enhance awareness of the relationship between the Sun and the aurora.



Astronomy North

