

Caithness Astronomy Group Public and Schools Solar Observing Activities 2012

During the International Year of Astronomy, Caithness Astronomy Group held numerous public and school events, engaging the local population with the varied science and technology associated with Space and Astronomy.

Thanks to funding from the **IoP in Scotland** and the **Dounreay Communities Fund** in 2010, Caithness Astronomy Group (CAG) were able to purchase solar observing equipment that provided a new avenue for engaging with the local population that would complement our night time observing events. In 2012 these two organisations again generously provided funding to further enhance the solar observing educational capabilities available to our Group.

The funding this year was primarily used as follows:

- purchase of sunspotter scopes
- purchase of educational materials that could be used to enhance educational activities particularly aimed at providing a better understanding our Sun and its interaction with the Earth
- travel and accommodation expenses for a visiting speaker and venue hire for some of our public events

Receipt of the 2012 funding, has supported CAG in undertaking the following related activities which involved hundreds of people of all ages:

- Public solar observing events held at Castletown and Thurso during the summer months
- A solar observing session held with a local Scout group as part of activities allowing them to obtain their Astronomers Badge
- Solar observing and activities relating to the science of the Sun and the Sun-Earth interaction were a significant part of what CAG did at “family day” activities at the Caithness Science Fair (March) and the Orkney International Science Festival (September).
- The solar observing equipment and educational materials were loaned out to 2 local high schools for extended periods to use during class time at their convenience.
- A public event focussing on the aurora was hosted with guest speaker Ken Kennedy (BAA Section Director) giving a talk on the topic and its link to the Sun. The northern lights is a phenomenon that has a lot of local interest with the general public and the funding supported a display of locally taken aurora photographs that was shown at this and 2 other public events later in the year.

When not being used for the above, the new equipment was utilised for solar observing by CAG members. CAG intend to continue to make use of the equipment in this way and for any other suitable public and school engagement activities that may arise.

We hope that the unusual opportunities made possible by the funding will have been memorable to all and may have sparked or re-kindled an interest in STEM subjects and the universe in which we live.

Gordon Mackie
Caithness Astronomy Group
Dec' 2012

The following pages contain photos from **some** of our events this year that were possible thanks to the funds provided. The funding enhanced our activities primarily by providing new equipment and materials and allowing us to hold extra public events.

Public Events

Caithness Astronomy Group

is delighted to announce the public talks by
Ken Kennedy
British Astronomical Association Aurora Section Director



"Noctilucent Clouds"

Caithness Horizons, Thurso, Caithness
Friday 25th May at 19.00hrs.



"Aurora"

Caithness Horizons, Thurso
Saturday 26th May at 18.00hrs

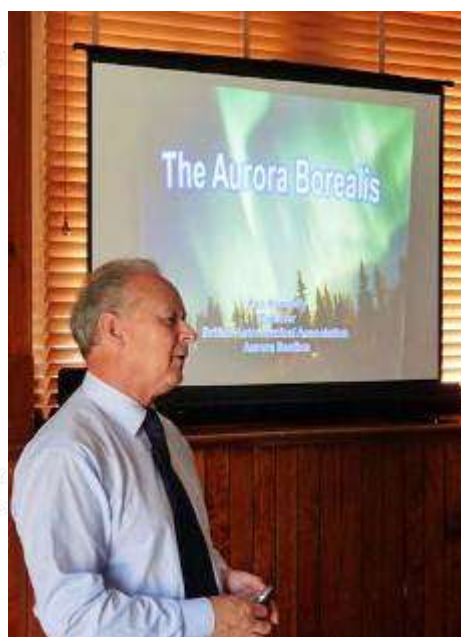
Come along and learn more about these beautiful natural phenomena, and also see a selection of stunning aurora and NLC photos taken by local photographers.

Times are subject to change. Caithness Astronomy Group will inform you of any changes at the event.

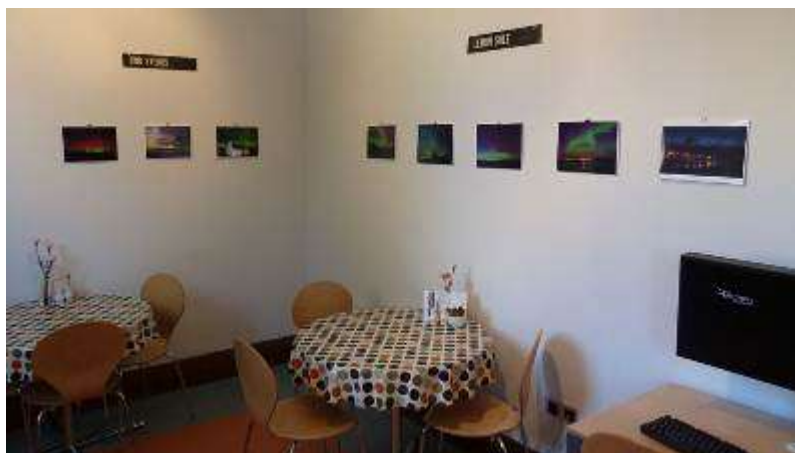
Contact: Gordon Mackenzie - gordon@caithnessastronomygroup.co.uk - Use Facebook to connect - <https://www.facebook.com/caithnessastronomygroup>

Supported through
Baird Group

IOP Institute of Physics
In Scotland



Above are photos from a public event on the Aurora, where the guest speaker was Ken Kennedy of the BAA



The photo on the left shows part of a Gallery of locally taken Aurora and Noctilucent Cloud photos whilst on display in the Thurso Museum Café. It was on display there for the entire month of June and attracted a lot of attention.

These eye-catching photos were also used in free public galleries at the Orkney International Science Festival and the Wild North Festival.

Solar Observing

Unfortunately the Sun did not make an appearance at all our daytime events, but when it did we were prepared.....



Light as the astronomer's tool.....



After a public talk on extrasolar planets by Prof Cameron of St Andrews University there was the opportunity to try out some hand made spectroscopes to aid with the appreciation of the importance of spectroscopy in the search for these planets, and in astronomy as a whole.

Science Festival Family Day Events in Caithness.....



.....& Orkney



Exploring light and magnetism (anyone recognise the world famous physicist who dropped by?)

The funding allowed the purchase of various educational materials including some for exploring light and magnetism. The materials were used in activities primarily aimed at providing a better understanding of our Sun and its interaction with the Earth. A supply of diffraction gratings was purchased to allow attendees to make simple spectroscopes that could be taken home from the festivals, allowing them to further explore light sources in the everyday world around them.

Schools & Club Usage

**Loan Agreement
Caithness Astronomy Group Solar Observing Equipment**

This records the agreement for loan of the Caithness Astronomy Group Solar Observing equipment (inventory overleaf) subject to the conditions stated below.

Loaned to:Peter Darmady..... (nominated person)
ofWick High School..... (establishment)

Loan period:13/9/12..... to5/10/12.....

- I agree to abide by the following conditions of the loan:
- To follow the safety precautions required for using the equipment as detailed at the equipment training session and on the supplied pre-use checklist
 - To take reasonable care of the equipment and to report any damage that occurs
 - Equipment will be used under the supervision of trained individuals
 - To keep the equipment in a safe & secure location when not in use
 - To provide brief feedback on its use

Note: It is extremely important that the safety precautions required for observing the Sun are made clear to all involved. Caithness Astronomy Group are not liable for any injury sustained through inappropriate solar observing activities associated with this loan.

Signed: P. Darmady Date: 2.10.12

Feedback
We hope you found the resources useful. Please provide feedback below. If you have any photos showing use of the solar observing equipment that CAG could utilise in the final report to the project sponsors please forward them to me.

Details of Use eg how many times, age range & no of pupils involved

4 x	11-12	15
	12-13	16
	14-15	20
	12	2



More examples of Caithness Astronomy Group activities in 2012 can be found on our website at:
www.spanglefish.com/caithnessastronomygroup/index.asp?pageid=403167