

PR and Outreach

Chris Davis, September 2012



© 2010 RAL Space

What is Outreach?



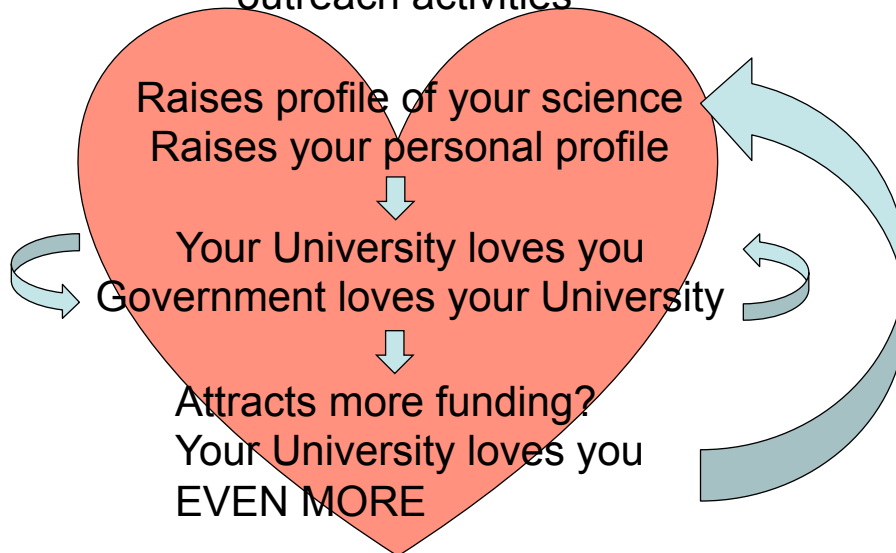
Also known as ...

- Public Relations (PR)
- Impact
- Knowledge Transfer (KT)
- Knowledge Exchange (KE)
- Public Understanding of Science and Technology (PUST)

© 2010 RAL Space

Why do I need to do outreach?

STFC expect you to spend some of your research effort on outreach activities



© 2010 RAL Space

Who are my audience?

‘Stakeholders’

- General Public
- Schools
- Government and decision makers
- Tax-payers
- Teachers
- Journalists
- Industry
- University students
- International media

This is everyone over 5!
Try to be a little more discerning...

© 2010 RAL Space

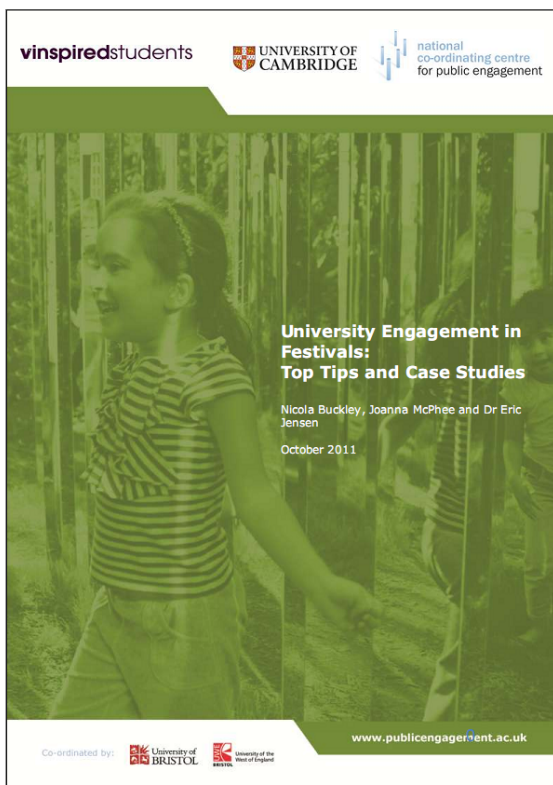
What type of outreach?



- TV news
- Radio
- Film
- Newspapers
- Documentary TV
- Public talks
- Classroom demonstrations
- Twitter
- Facebook
- Youtube
- Citizen Science
- Flashmob?!

© 2010 RAL Space

Don't always choose 'safe' events

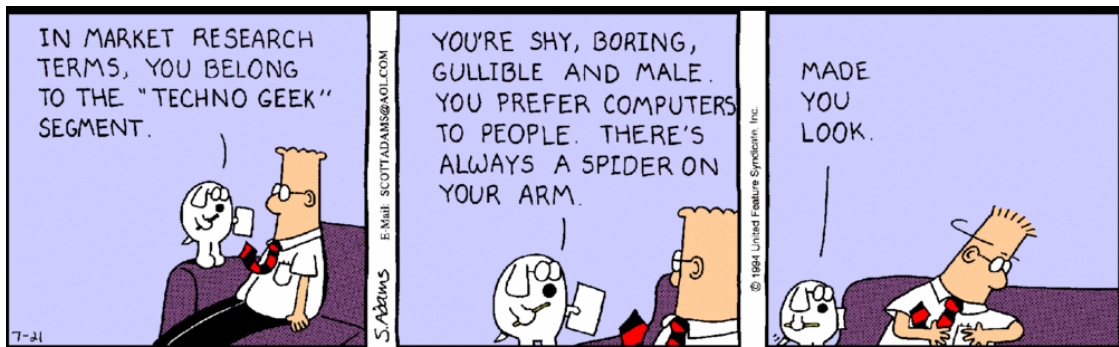


© 2010 RAL Space

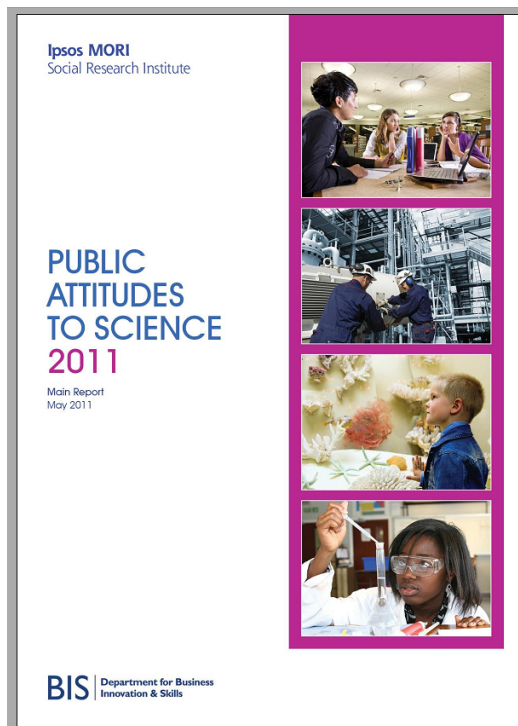
Having identified a target audience and the types of activities that could be done, how do I choose an activity that will reach my target audience?

You need Market Research!

Don't worry, it's all been done for you



© 2010 RAL Space



There are also many other useful documents that have already been prepared by RCUK and others to help you with your outreach.

© 2010 RAL Space

**Dialogue with the public:
Practical guidelines**

Research Councils UK

August 2002



Developed for the Research Councils UK and the Office of Science and Technology
by
People Science & Policy Ltd & Taylor Nelson Sofres

This document identifies potential target audiences and tells you how to reach them

© 2010 RAL Space

Table 1 The "Science and the Public" groups – Attitudes and demographics

Name of Group	More likely to agree that...	Less likely to agree that...	Demographic features
Confident Believers	<i>"The benefits of science outweigh any harmful effects." "Even if it brings no immediate benefits, scientific research which advances the frontiers of knowledge is necessary and should be supported by the Government."</i>	<i>"What people like me think will make no difference to the Government." "Science is getting out of control and there is nothing we can do to stop it." "The speed of development in science and technology means that it cannot be properly controlled by Government."</i>	Relatively well off, well-educated, middle aged, equally balanced between men and women.
Concerned	<i>"It is important that young people have a grasp of science and technology" "Science is getting out of control and there is nothing we can do to stop it" "Scientists seem to be trying new things without stopping to think about the risks."</i>	<i>"The benefits of science are greater than the harmful effects." "Because of science engineering and technology there will be more opportunities for the next generation."</i>	This is the most female of all the clusters, 60% are female. Their social grade, household income and education levels tend to mirror the population as a whole.
Not Sure⁶	<i>"I am not interested in science and don't see why I should be." "I don't understand the point of all the science being done today".</i>	<i>"Science and technology are making our lives healthier, easier and more comfortable." "Science is such a big part of our lives that we should take an interest."</i>	Tend to have the lowest household incomes, the lowest level of education and to fall into social grades D and E (unskilled manual workers and those wholly dependent on state benefits). Most likely to have young children.
Technophiles	<i>"Because of science, engineering and technology there will be more opportunities for the next generation." "It is important to know about science in my daily life."</i>	<i>"The achievements of science are overrated." "I am not interested in science and don't see why I should be." "Politicians support science for the good of the country."</i>	Best educated in science, this largely ABC1 group is 55% male and tends to be in their thirties, likely to have children aged between five and ten.
Supporters	<i>"Science and technology are making our lives healthier, easier and more comfortable." "Politicians support science for the good of the country."</i>	<i>"I am not interested in science and don't see why I should be." "The achievements of science are overrated."</i>	This relatively young group's social grade, household income and education levels tend to mirror the population as a whole.
Not for Me	<i>"Because of science, engineering and technology there will be more opportunities for the next generation." "I don't understand the point of all the science being done today".</i>	<i>"It is important to know about science in my daily life."</i>	Over three-quarters have no science qualifications. Half are 65 or over. Just over a quarter are social class E otherwise they are more likely to be social grade C2 (skilled manual workers) than the average.

⁶ The response "Don't know" or "neither agree nor disagree" tends to dominate this groups responses reflecting their unformed views on science and scientists.

Table 2 The "Science and the Public" groups – where to find them and how to reach them

Name of Group	7 Places/events more likely to visit	Places/events less likely to visit	Media used
Confident Believers	Cinema, historic house or garden, visitor centre, museum or science centre.	Art gallery, zoo, theme park.	Most likely to read a broadsheet, but still only 19% read a daily broadsheet regularly, compared to 45% who read a tabloid. Almost a third do not regularly read a daily paper. Watch "moderate" amounts of TV and are more likely to watch "heavyweight programming" than most of the other groups. Least likely group not to listen to the radio, but listening hours quite short. Above average access to the Internet.
Concerned	Cinema, visitor centre, historic house or garden, theatre.	Concert/opera, art gallery, zoo.	Moderate TV watchers, but most likely to watch BBC2. Broadly average levels of newspaper readership 4:1 ratio of tabloid to broadsheet readership. Average levels of Internet access and usage. A fifth of this group reads the Daily Mail, compared to 15% of the population.
Not Sure	Cinema, theme park, sporting event, zoo.	Meeting/debate, lecture/talk, art gallery, museum or science centre.	Relatively high levels of TV watched, dominated by ITV (most watched channel by 50% of the group). Below average radio usage, which is dominated by music stations. One of the least likely groups to regularly read a broadsheet (6%) but 57% regularly read a tabloid paper. Very low levels of Internet access (20%) and usage (15%).
Technophiles	Cinema, visitor centre, museum or science centre, visitor centre, historic house or garden.	Meeting/debate, art gallery, zoo.	Low levels of TV watching, with much lower than average levels of ITV watched. Least likely to read a daily newspaper (40% do not regularly read a daily paper) 3:1 ratio of tabloid to broadsheet readership. Highest levels of Internet access (47%) and usage (38%).
Supporters	Cinema, visitor centre, theme park, historic house or garden.	Art gallery, meeting/debate, zoo.	Most likely to read a daily paper (only 27% do not regularly read a paper). Tabloids dominate by 6:1. Average levels of TV watched with viewing habits mirroring national average. Average levels of Internet access and usage.
Not for Me	Cinema, historic house or garden.	Lecture/talk, meeting/debate, art gallery, concert/opera.	Highest levels of TV watched 25% watch more than 36 hours per week. Most likely group to not listen to the radio (23% do not listen to the radio at all). Slightly higher than average readership of a daily paper, tabloids dominate by 14:1. Lowest levels of Internet access (12%) and usage (8%).



If you want to segment your audience differently, there are documents for that too ...

Don't assume your audience think like you do!

Lateral Thoughts: Averil Macdonald physicsworld.com

What did sociologists ever do for us?

I have just discovered that I am a baby boomer. Actually, that is not quite true; of course I knew I was born during the period that defines the boomer generation (the late 1940s to early 1960s, although sociologists argue over the boundaries), but I had not appreciated that my boomer-hood defines the way that I think and react.

You see, boomers in the UK and western Europe were raised in a time of post-war rationing by parents who had gone through the deprivations of the war. Hence, from an early age, we were instilled with a tendency to clear our plates at meals, despise waste, prefer to make do and mend, and expect to save to afford what we want to buy. On a more positive note, we boomers recognize the value of education as a way to make the best of life, and accept that those who achieve deserve to be rewarded.

But what of those who just missed out on being baby boomers? Sociologists call them Generation X. Born somewhere between the early 1960s and the early 1980s, Gen-Xers are more nihilistic as a result of their experiences of recession, the Vietnam War, the Winter of Discontent in 1978-1979, and the stock-market losses of the late 1980s. However, they also experienced the impact of human-rights activists challenging the status quo; think of Nelson Mandela and Amnesty International. Gen-Xers value personal freedom, and at work they look for job satisfaction and a work-life balance. They are prepared to invest in things they value and they also enjoy treating themselves to nice homes, smart cars and good holidays. Finally, they actively seek out the fun side of life and believe they deserve "me-time" (this is why "activity days" and spa outings are currently so popular) to contrast with the negativity that underpinned their early experiences.

This is all well and good. I hear you say, but what does it have to do with physics? Well, the fact is that realizing how generations are influenced by world events in their formative years (and by the approaches taken in their upbringings) has suddenly given me an insight into why young people have not been persuaded to study the physical sciences beyond secondary school for the past 10-15 years.

Because, you see, the present generation of school and university students is Generation Y. Born from the early 1980s onwards, members of this generation have been very fortunate. Until very recently, they have enjoyed the fruits of a booming economy. At home, they have been indulged by their boomer and Gen-Xer parents. Gen-Yers have been the centre of their parents' attention, with a comprehensive programme of clubs and activities set up for their delectation: think violin lessons, gymnastics, trampolining, drama classes. From an early age they have been given choice: picture two year olds being asked "Do you want chicken nuggets or burgers for dinner?"

The social life of Generation Y children is hectic, possibly because Generation X and late-boomer parents are often dual-career families who feel the need to organize "quality time" for their offspring. The result is that the Gen-Y child craves continuous stimulation, is unable to organize his or her own time, and often hates being alone. Being part of a thriving social group is essential. For a Gen-Y child, the universe revolves around them: they expect choice and they expect to negotiate terms, whether for bedtimes, allowances, school subjects or careers.

Sociologists have studied these different generational



The Gen-Y child expects choice and expects to negotiate terms, whether for bedtimes, allowances, school subjects or careers

motivators. They have found that, when asked, Generation Y youngsters say that the most important thing for them is to be famous, with being rich ranking a close second. This stands in sharp contrast to Gen-Xers, who put job satisfaction and "me-time" at the top.

For the future of physics, these differences are crucial. When we try to increase the number of youngsters choosing to study physics after age 16, we are effectively "selling" them the subject and hoping to change their behaviour. Simple marketing theory states that to change behaviour you have to address your audience's motivators, but this is where we have been failing.

When Gen-Xers talk to Gen-Yers about how physics is interesting, exciting, fascinating and offers job satisfaction, we are not addressing their motivators. Gen-Yers will enjoy the "fun demos" and the hands-on activities – after all, they crave stimulation and have always had their time organized – but enjoying the event and finding it interesting does not mean that they plan to change their behaviour and subject choices as a result. A Generation X person may be persuaded by these arguments, but a Generation Y person will not. If we really want to communicate with Gen-Yers in terms that they appreciate, we should talk in terms of physics being an important and communal activity that offers high status and well-paid jobs. These are Generation Y motivators, and this is the message they need to hear.

I do not advocate stopping all those whizz-bang outreach activities, but if we want to change behaviour and attitudes to physics, then we have to do other things as well. To go back to marketing theory, "you can only sell benefits, you can't sell features"; we need to "give them the message they are seeking to hear". Physics has benefits that appeal to our Generation Y students and they are waiting to hear the message. Let's give them the good news!

Averil Macdonald is a physicist and professor of science communication at the University of Reading in the UK, e-mail a.m.macdonald@reading.ac.uk

Readers are invited to submit their own Lateral Thoughts. Articles should be between 300 and 950 words long, and can be e-mailed to pw@iop.org.

Physics World February 2009

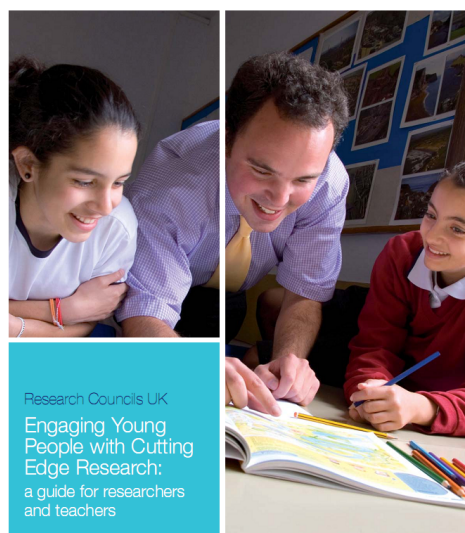
Baby-boomers (born 1940s-1960s) recognise the value of education and accept that those who achieve deserve to be rewarded

Generation-X (born 1960s-1980s) value personal freedom and look for job satisfaction and work-life balance

Generation-Y (born 1980s -) have enjoyed prosperous times (until recently!) need continuous stimulation, expect choice and to negotiate terms. They also want to be famous.

So, things that motivate Baby-boomers and Gen-Xers (who think science is worthy and gives job-satisfaction) do not interest Gen-Yers who want high-status communal and well paid jobs

Averil MacDonald, Physics World, Feb 2009



Research Councils UK
Engaging Young People with Cutting Edge Research:
a guide for researchers and teachers

RESEARCH COUNCILS UK



The engaging researcher

vitae
realising the potential of researchers

Inspiring people to engage with your research

beacons for public engagement



Sophie Duncan Suzanne Spicer

www.vitae.ac.uk/researcherbooklets

Assessing outreach



In order to determine how successful your outreach was, you need to assess your outcomes

Were the attitudes of your audience changed by your efforts?

How many people did you reach?

Did you reach your target audience?

Were people positive about the experience*



*Not necessarily a bad thing if they weren't!

© 2010 RAL Space

Ways of evaluating your outreach activity



- Questionnaire (can be annoying!)
- Hits on a website (can be meaningless!)
- Membership of a website
- Facebook 'Likes'
- Tweets and retweets, new followers
- Uptake in subscription to a course
- Advertising Value Equivalent
- Google media search



© 2010 RAL Space

Advertising Value Equivalent

How much would it have cost to get the same exposure for your science through paid advertising?

- Column inches in printed media such as newspapers
- Air time on TV or radio
- Tweets
- Hits on website

WARNING: The use of this technique can perpetuate the fallacy that 'cost' is the same as 'value'.

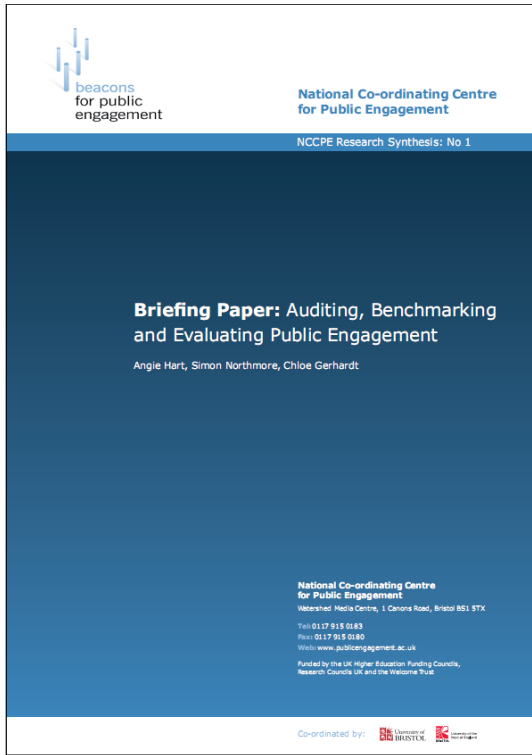
For example: What is the value of a negative story?

What is 'Impact'?



It is for you to define! However, it is more impressive if you openly set out to achieve specific goals.

- Number of people reached?
- Increase in science uptake in local schools?
- Testimonials (did you make people happy)?
- Hits on website?
- Change in Government policy?
- Greater income for your University/ UK?



The NCCPE have produced a guide to evaluating public engagement

Obtaining funding from STFC for outreach

“The Council continues to encourage research grant-holders to spend up to 1% of grant funds on 'public understanding' work, which has to be found from savings. University Departments can combine funds from different grants.”

“Typical usage is for research scientists' personal 'public understanding' work (e.g. talks to the public or schools, Website describing research), encouraging them to promote current front-line research to wider audiences.”



STFC 'Small Awards' scheme



Home > Public and Schools > Funding for Public Engagement > Small Awards Scheme > Public Engagement Small Awards Scheme

Public Engagement Small Awards Scheme

The closing date for the 2012B round is 11 October 2012

All applications must be submitted through the RCUK Joint electronic submission (Je-S) system. E-mailed or hard copy applications will not be accepted. Please see the notes for guidance for further information.

The Science in Society Programme Small Awards Scheme provides funds for small, local or 'pilot' projects promoting STFC science and technology. Anyone can apply, including grant-funded research groups, STFC research facility users, schools, museums, etc. Awards range from £500 to £10,000 and the expenditure can go towards materials, salaries and travel & subsistence.

Projects must be relevant to publicising engagement or teaching about the STFC science and technology areas, namely:

- particle physics;
- nuclear physics;
- space, ionospheric, solar and planetary science;
- astronomy;
- astrophysics;
- cosmology;
- studying materials with muon and neutron sources;
- studying materials with synchrotron light sources;
- research using laser facilities;
- other science areas

To apply for a Small Award you must:

- read the notes for guidance - these contain the rules of the scheme and offer advice on completing the online application form;
- complete the online application form (available from 01 August 2012)

Upon completion of the project you must complete a final report form.

For further information, please see our frequently asked questions.

Other useful links

- Latest Chair's report
- Previous winners

Page last updated: 14 February 2012 by Chris Woolford

© 2010 RAL Space

•£500 – £10,000

•Open to anyone in the UK

•Users of STFC facilities encouraged to apply

•Mandatory to include an STFC researcher

•No restrictions on what the money can be used for

N.B. Websites must be sustainable and adhere to accessibility rules

STFC 'Small Awards' scheme



Key things to Include in your proposal.

- The review panel particularly welcome applications which involve partnerships with other schools or your local community,
- Projects must be relevant to the Science that STFC supports and the aims and objectives of the Scheme
- Please ensure that you justify all costs in your application and if the bid is more than £10,000 you must make it clear what the STFC funds are being used for.
- Remember, a detailed and well thought out evaluation plan will strengthen your application.



© 2010 RAL Space

What we won't fund

- We will not accept applications which are aimed solely at the low end of primary school children aged 5-8. We will however consider applications which include them along with one of our 'Key Audiences'.
- Applications for a piece of equipment for your school alone are not viewed positively, unless the equipment is part of a novel project that could be copied by other schools.

© 2010 RAL Space

STFC 'Small Awards' scheme

Selection criteria:

1. Relevance to STFC areas of science and technology

Proposals which can demonstrate a clear and timely link to current STFC-supported research projects (e.g. the Large Hadron Collider, space missions such as Herschel and Planck and new results from neutron or light sources) are more likely to be funded.

2. Key Audience Included

The audience must include at least one of the STFC's key audiences. These are: **young people aged 10-18 (particularly those age 10-16); teachers; the general public; opinion formers; and, audiences not previously engaged with science.**

3. Quality of Project Team, Planning and Delivery

Proposals should demonstrate that the project team has the appropriate range of skills to carry out the project successfully. Plans should be realistic and clearly linked to the desired objectives.

4. Impact and Cost Effectiveness

Proposals which are likely to have a large impact (either reaching a large audience or having a significant impact on a smaller one) in relation to their cost are more likely to be funded.

Projects where there is evidence of a 'multiplier effect' (for example projects which inform or train science advisers and providers of in-service training) will be viewed positively.

5. Timeliness

Projects relating to topical themes (Crystallography Centenary, LHC, Cosmic Rays, Exoplanet discoveries, Herschel and Planck space missions etc.), or current initiatives in education and other relevant fields are desirable.

6. Innovation/Proven Success

Innovative projects and pilot schemes are encouraged, particularly if there is likely to be a sustainable outcome. When a STFC-funded activity proves successful, we are willing to consider continued funding, provided that a clear forward plan is provided.

We are happy to accept project submissions that are necessarily one off (e.g. because they relate to a specific event such as a Solar Eclipse) particularly if there can also be a sustainable outcome.

Projects where it is clear that there will be no possibility of sharing the idea with others are not desirable.

7. Quality of Evaluation

The inclusion of a strong, realistic evaluation plan, commensurate with the size of the project is viewed positively.

© 2010 RAL Space

STFC 'Large Awards' scheme



Home > Public and Schools > Funding for Public Engagement > Large Awards Scheme > Science in Society Programme Large Awards Scheme - Previous Winners

Science in Society Programme Large Awards Scheme - Previous Winners

Click on the links below to view previous Large Awards Scheme winners.

Large awards projects		
1998	1999	2000
2001	2002	2003
2004	2005	2006
2007	2008	2010
2011		

Page last updated: 15 May 2012 by Chris Woolford

Science and Technology Facilities Council
Switchboard: 01793 442000

GLOSSARY : SITE-MAP : ACCESSIBILITY : PRIVACY/COOKIES : ACCESS TO INFORMATION : TERMS OF USE : WEBMASTER

£10,000 - £100,000

© 2010 RAL Space

STFC 'Large Awards' scheme



2011 awards

Dr Janet Sumner - Open University

60-second adventures in thought: astronomy, planetary sciences and particle accelerators

£98,472

The project team have recently had an outstanding success with animated short-form videos for the Web, holding ALL 10 of the global top 10 downloads on the iTunes University channel. The subject matter was the history of English, narrated by Clive Anderson and the tone is humorous but informative. This was followed up with Sixty Second Adventures in Thought, narrated by the comedian David Mitchell, covering philosophical topics.



The Open University

Dr Teresa Anderson - Jodrell Bank Discovery Centre

Big Science – Big Telescopes

£76,500

The aim of this project is to excite and inspire 11-16 year olds, their families and the general public by engaging them with the 'Big Science' carried out with the 'Big Telescopes' funded by STFC such as the VLT, ALMA, e-MERLIN, and proposals such as the European Extremely Large Telescope and the Square Kilometre Array SKA.



© 2010 RAL Space

STFC Public Engagement Fellowships 2012

The closing date for the 2012 round is 4.00pm on 1 March 2012

The aim of the scheme is to contribute to the STFC's Public Engagement Programme by investing in good communicators with research credibility. They will act as champions or ambassadors for STFC's science, technology, engineering and mathematics (STEM) work to schools, the media or public audiences.

Science in Society fellowships are aimed at those with significant research experience who have demonstrated a track record in outreach or communications work. The fellowships will recognise and reward current practitioners and enable them to expand the work they do in public engagement.

Fellowships will buy time for additional or extended communication activities which will have a significant national or regional impact.

Both STFC grant-funded researchers and users of STFC facilities are eligible to [apply on the Je-S website](#). Facility users would champion generic facility programmes, linked to work at STFC-funded facilities in the UK or overseas. Topics might include energy research; how neutrons or light sources are used to probe materials; high performance computing; lasers; e-science, etc.

As well as their own wide general research area, other legitimate subjects for activities include current STFC STEM areas in general, the nature of the research process, and ethical and social issues that arise from research and its applications.

We do not wish to be prescriptive about the activities carried out by fellows, but the following are examples of the kind of work which might be expected:

- Working with mass media organisations, perhaps by inspiring or contributing to major science features, series or columns in popular print media, broadcasts, etc.
- Producing or advising on a major web-based or multimedia resource, possibly including webcasts, podcasts, blogs, etc.
- A major series of public lectures.
- Working with science centres or museums to develop new ways of presenting STFC STEM work.
- Working with the educational sector, including Science Learning Centres, to help teachers or curriculum developers to embed STFC STEM areas in their programmes.

We will not support proposals which are solely aimed at writing a popular science book, but will consider proposals in which the production of a book is part of a larger project.

There is a two-stage process. Short-listed applicants will be interviewed in May 2012, and funding decisions would be known very soon after interviews. Fellowships are normally given in the form of research grants to approved Research Organisations eligible to hold research grants.

For further details, please read the [notes for guidance](#).

A list of current Public Engagement Fellows is available.

Applicants are encouraged to telephone the office for further information:

Neville Hollingworth
STFC Science in Society Programme
Polaris House
North Star Avenue

© 2010 RAL Space

Funds good communicators with research credibility up to £125k (£100k FEC)

Typically funds 20% of a Fellow's time and lasts for a period of between three months and three years.

Buys time for extended communication activities with significant national or regional impact

Open to STFC funded researchers and users of STFC facilities

STFC Science in Society Fellows are eligible to apply for STFC Small or Large Awards

Explicitly *not* for writing books

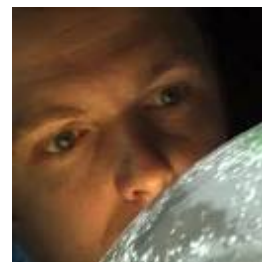
Current STFC Science in Society Fellows



Dr Jim Wild
Department of Communications Systems
Lancaster University

"A place in the Sun: Taking solar system science to the public"

Demonstrating the relevance of solar system science and solar physics, especially the effects of "space weather", on modern technologies for the general public, policy-makers, teachers and secondary school pupils.



Dr Helen Mason
Applied Maths and Theoretical Physics
University of Cambridge

"Our dynamic Sun"

Dr Mason will provide a leadership role in public engagement with solar physics. As part of this, she will update the Sun|trek website, which is an educational website aimed at 11-16 year olds and their teachers. It describes the astronomy and science of the Sun and its effect on the Earth's environment.



© 2010 RAL Space

Homepage | Site index | Events | About the Plan | Contributors | Visitor Survey | Contact the Plan

Wednesday 5th September, 2012

SEARCH GO Register

Homepage Solar Interior Solar Exterior Interplanetary Space Magnetosphere Ionosphere / Atmosphere Planetary I.H.Y.

Welcome to the Sun Earth Plan Website

2007-8 marks the 50th Anniversary of the International Geophysical Year, 1957-58. One of the memorable events during IGY was the launch of Sputnik in 1957, the world's first artificial satellite. IGY heralded the modern space era.

This year, scientists and engineers from all 191 Member States of the United Nations are participating in an international campaign to learn more about the Earth, the Sun and our environment. 2007-8 has been designated the International Heliophysical Year, or IHY. (Helios was the ancient Greek name for the Sun.) A key objective of IHY is to celebrate the beauty, relevance and significance of space and Earth sciences to the world.

The UK hosts a vibrant solar-terrestrial physics (STP) community with an enviable high profile in the international research arena. They are also involved in a dazzling array of space research projects, from earth orbiting satellites and ground-based experiments to far-ranging planetary probes and landers. SUN EARTH PLAN celebrates Britain's pivotal role in space science.

Solar Interior
Studying the complex heart of the Sun.
[Solar Interior feed](#)

Solar Exterior
Understanding the flow of energy from the Sun to our planet.
[Solar Exterior feed](#)

Interplanetary Space
How the Sun's influence reaches across the entire Solar System.
[Interplanetary Space feed](#)

Solar Storms: Predicting and Protecting Against Geomagnetic Storms
[\[Full Story\]](#)
[view all articles](#) [1] 2 3 4 5

Your Questions

"Will it be possible to see the aurora from Kent tonight (17 Feb 2011)?"
Roger, Kent, UK

The last time we had aurora clearly visible from northern England (Lancaster) was in January 2005 and that followed an X-ray solar flare classed as an X7.

On Tuesday 15 Feb 2011 (at about 2am) we had the biggest solar X-ray flare that we have had for something like 4 years. It was an X2 class flare, that means the energy flux was greater than 0.002 Watts per square metre.

This flare was accompanied by a coronal mass ejection, which is currently travelling through interplanetary space and our best guess is that it is heading straight towards Earth. If and when it hits it could trigger a geomagnetic storm. If the CME has a large southward magnetic field component it might lead to conditions ripe for aurora over mid-latitudes (i.e. the UK).

The important words there are 'if', 'might' and 'could'. Nothing is guaranteed although this is the best chance for quite some time. The CME is still yet to strike so we don't know how big a storm we might

Sun|trek

Sun|trek adventures | Sun|trek homepage

Home Sun|trek homepage

Home Page
A quick tour
Sun|trek adventures
Solar guides
Factory
Gallery
School Projects
Classroom Resources
Sun|trek
Contact us
The Sun|trek Team
Useful links & resources

Welcome to Sun|trek. Take a journey into space and find out more about the Sun and its effect on the Earth.

Hinode

Using Hinode, we hope to understand better the connection between the Sun's magnetic field and its corona.

What's New **What's Hot** **4 Schools**

Solar Dynamics Observatory SDO
X Class Solar Flares
New Resources Available

Check out our new Sun|trek website

There's lots to discover on Sun|trek, so dive in and start exploring here.

We can't do your homework for you, but if you have a question about the Sun you can always ask the Sun|trek team

Ready for a Sun|trek adventure? Take a journey with us to the Sun and around its neighbourhood. Just select one of the eight sections, choose a topic and follow their trails to take part in the Sun|trek adventure. Have fun!

solar surface & below	hot solar atmosphere	magnetic Sun	flowing from the Sun
Sun-Earth connection	solar spacecraft	Earth & beyond	the Sun as a star

[Solar Surface & Below](#) | [Hot Solar Atmosphere](#) | [Magnetic Sun](#) | [Flowing from the Sun](#)
[Sun-Earth Connection](#) | [Solar Spacecraft](#) | [Earth & Beyond](#) | [The Sun as a Star](#) | [Contact Us](#)

UNIVERSITY OF CAMBRIDGE
 uclan
 Science & Technology Facilities Council
 IMDC interactive media design consultants

Join us on [facebook](#)

STFC Bursary scheme



Home > Public and Schools > Bursary scheme for media workshops > Bursary scheme for media workshops

Bursary scheme for media workshops

Bursary scheme for media and communication skills training courses

STFC, as part of its Science in Society Programme, may be able to pay for scientists and engineers working in an area eligible for the Council funding to take part in the training courses listed below.

If your area of research falls outside of the STFC remit you will not be eligible to receive this bursary.

Media training course at the Royal Society

On this course you will discover how the media operates and be given the confidence to work with it. The experienced tutors will tell you how and why editors in all branches of the media decide what makes a story newsworthy. Confirmed course dates are:

- ▶ 3 October 2012
- ▶ 28 November 2012
- ▶ 8 March 2013
- ▶ 26 July 2013
- ▶ 18 October 2013

Further dates / venues will be announced in due course.

Communications skills course at the Royal Society

This course teaches how to write in a clear, understandable way without using jargon and how to structure a talk. The advantages and disadvantages of visual aids are discussed and explained. The course will also teach how to chair conferences and how to run question and answer sessions. Confirmed course dates are:

- ▶ 2 May 2012
- ▶ 21 November 2012
- ▶ 21 March 2013
- ▶ 24 May 2013
- ▶ 30 September 2013

Further dates / venues will be announced in due course.

Two-day residential courses at the Kavli Royal Society International Centre in Buckinghamshire

This two-day course includes both the communication skills course and media skills training. As well as the full programme for both courses, the residential format of this course allows for extended debate, discussion and dialogue beyond the training sessions.

- ▶ 24 - 25 January 2013
- ▶ 25 - 26 April 2013
- ▶ 12 - 13 September 2013

The courses will be designed and run by [The Royal Society](#), and the course tutors will be Judith Hann and

Funds attendance at training courses plus expenses up to a value of £250

Covers specific media training & communications skills workshops run by the Royal Society.

Courses run throughout the year

© 2010 RAL Space



Home > Public and Schools > Funding for Public Engagement > All funding schemes > Science in Society funding opportunities from other bodies

Science in Society funding opportunities from other bodies

The following funding schemes provide complementary opportunities to support public understanding/awareness initiatives:

- ▶ [The British Science Association Media Fellowships](#)
A scheme run by the British Science Association that lets you experience first hand how science is reported by spending 3-8 weeks with a national press, broadcast or internet journalist on a summer placement, working with them to produce accurate, well informed news pieces about developments in science. Sponsored by STFC, RCUK, BBRSC, IET and the Wellcome Trust
- ▶ [The National co-ordinating Centre for Public Engagement](#)
A number of training opportunities to help build public engagement skills.
- ▶ [European Union Framework 7](#) - funding opportunities
A number of funding opportunities exist within the EU's Framework 7 programme to promote science education and culture, to bring science policy closer to citizens, and to put responsible science at the heart of policy making.
- ▶ [Holmes-Hines](#) memorial fund
A scheme run by EPSRC for projects in any area of science and engineering and has supported such things as prizes, scholarships and school trips to CERN.
- ▶ [National Endowment for Science, Technology and the Arts](#) - NESTA
Funded by the National Lottery from an endowment. The purpose of NESTA is to support and promote talent, innovation and creativity in the fields of science, technology and the arts. Fellowships and grant schemes are announced from time to time.
- ▶ [BIS - Science in Society](#)
Our parent government department is the Department for Business Innovation and skills. The BIS Science in Society programme includes strategy and policy setting, and support for national initiatives such as Sciencewise, the Expert Resource Centre for dialogue and debate, STEMNET and STEMPIENTS.
- ▶ [Royal Society Partnership Grants Scheme](#)
Offers funding for schools who, through working in partnership with scientists and engineers, develop and deliver exciting and creative projects to engage young people with science.

Page last updated: 14 February 2012 by Chris Woolford

© 2010 RAL Space

Other funding bodies are available.....



STEMNET creates opportunities to inspire young people in Science, Technology, Engineering and Mathematics (STEM).

Register as an ambassador /
Log into E & E Database

Search
Advanced Search

Home | [STEMNetworking](#) | [About Us](#) | [Ambassadors](#) | [Teachers](#) | [Employers](#) | [News](#) | [Events](#) | [Resources](#)



Extending the STEM Ambassadors Programme into Higher Education Institutions

Extension into Higher Education: Pilot 2012-2013

- STEMNET is now offering seven selected UK universities access to the established STEM Ambassadors Programme.

- The project aims to increase undergraduates' understanding of STEM career options post-university.
- Ongoing evaluation, using online surveys, will ensure continuous improvement.

The Benefits of Taking Part

- Undergraduates will be able to:
 - Increase their awareness, insight and knowledge of the diverse STEM careers available.
 - Gain first hand exposure to experienced, driven STEM professionals in order to have their questions and queries answered specifically and directly.
 - Explore the various routes to different careers.
 - Make more informed decisions and reach their full potential.
 - Boost their motivation and develop more confidence in their abilities.
 - Benefit from other peoples' hindsight!

- Careers Department benefits from having this additional unique resource to offer, which can consist of various activities.

STEM Ambassadors

- [Local Contacts](#)
- [Enhancement and Enrichment](#)
- [STEM Ambassadors](#)
- [Teacher Case Studies](#)
- [STEM Clubs Network](#)
- [STEM Challenges](#)



© 2010 RAL Space

National scheme

Provide training and outreach opportunities

Process CRB Checking

Resources

Professional bodies (such as the RAS, Royal Society, IoP etc)

RCUK market research documents

STFC Media training

PR group of your University or institution

STFC communications team

Media contacts – journalists you may know

Home > News and Events > Press Office Contacts > Press Office contacts

Press Office contacts

STFC has press officers at a number of its sites who can handle enquiries about a wide range of issues.

During office hours

During office hours from Monday to Friday, 9.00am - 5.00pm you can contact one of the press officers using the following contact details:

- ▶ **Jake Gilmore**
Tel: +44 (0)1793 44 2092
Mob: +44 (0)7970 99 4586
- ▶ **Wendy Ellison**
Tel: +44 (0)1925 603 232
Mob: +44 (0)7919 548 012
- ▶ **Lucy Stone**
Tel: +44 (0)1235 445 627
Mob: +44 (0)7920 870 125
- ▶ **Corinne Mosese**
Tel: +44 (0)1793 442 870
Mob: +44 (0)7557 317 200

Outside office hours

The team is also able to handle urgent enquiries outside of normal office hours via the following telephone number: +44 (0)7092 982 664.

You can also write to the Press Office at:

- ▶ Science and Technology Facilities Council
Polaris House
North Star Avenue
Swindon
SN2 1SQ
Fax: +44 (0)1793 442 002

Page last updated: 19 June 2012 by Jill Little

© 2010 RAL Space

Education, Communications and Outreach Advisory Board

The Education, Communications and Outreach Advisory Board (ECO-AB) is an advisory body of the Council of the Science and Technology Facilities Council.

Purpose

The purpose of ECO-AB is to provide Council with strategic overview and assessment of, and advice on, the STFC's Royal Charter obligations in respect to education, outreach and communications, the societal impact of STFC programmes, and STFC's external reputation and stakeholder relations.

Terms of Reference

The Board will fulfil its role by providing overview and assessment of, and advice on:

- raising the level of public engagement with STFC's science and technology in the UK;
- provision of appropriate training and development to enable a wide range of subsequent career paths for STFC postgraduates, postdocs and other scientific and technological staff
- etc

© 2010 RAL Space

Citizen Science

The screenshot shows the Zooniverse website interface. At the top, it says "667,919 people taking part worldwide" and "REAL SCIENCE ONLINE". Below the header, there's a featured project from "ancientlives.org" titled "Discover the lives of Ancient Greeks". A navigation bar includes "All", "Space", "Climate", "Humanities", and "Nature". Under the "Space" category, several projects are listed with thumbnail images and brief descriptions:

- How do galaxies form?**: NASA's Hubble Space Telescope archive provides hundreds of thousands of galaxy images. (GALAXY Z@O)
- Explore the surface of the Moon**: We hope to study the lunar surface in unprecedented detail. (MOON Z@O)
- Study explosions on the Sun**: Explore interactive diagrams to learn out about the Sun and the spacecraft monitoring it. (SOLAR STORMWATCH)
- Find planets around stars**: Lightcurve changes from the Kepler spacecraft can indicate transiting planets. (planethunters.org)
- How do stars form?**: We're asking you to help us find and draw circles on infrared image data from the Spitzer Space Telescope.

© 2010 RAL Space

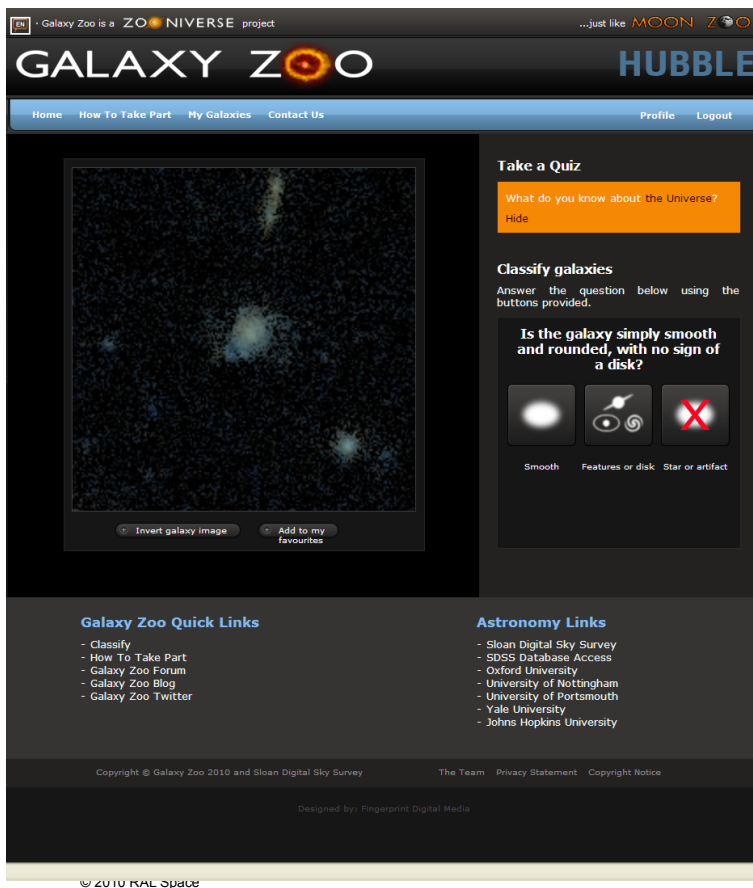
Actively involves the public

Enables science that would otherwise be prohibitively expensive to complete

Top motivation for volunteers is 'that I'm contributing to real science'

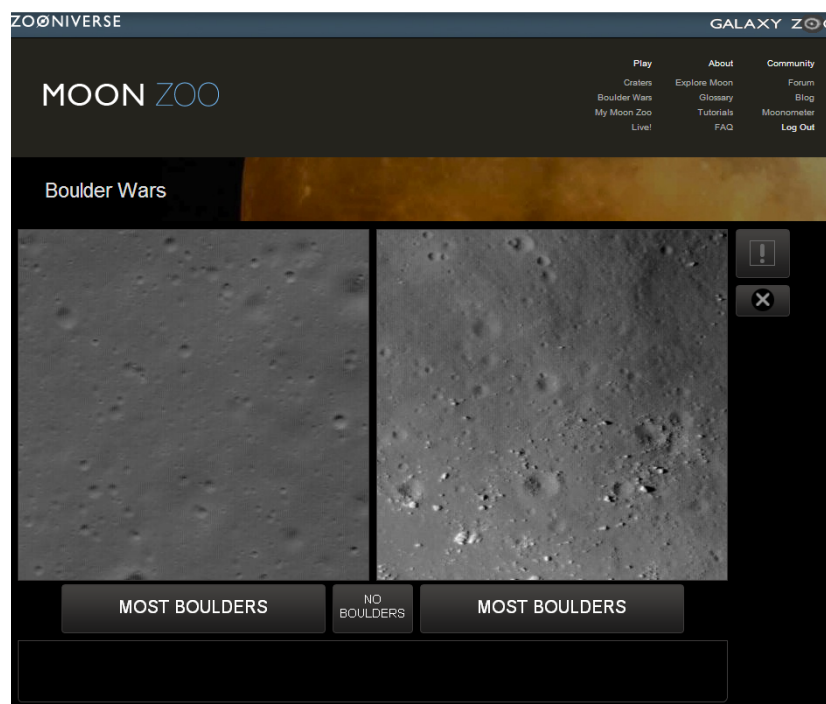
Demographic of participants includes equal numbers of men and women of a wide range of ages

Removes the subjectivity of a single 'expert' from the data analysis



Zooniverse projects have several things in common;

- Very large datasets
- Information not easily analysed by computer
- Real science objectives



WELCOME TO OLD WEATHER
Welcome to Old Weather we need your help gathering weather data from ships logs

cadet lepnoir weather reports on 0 pages contributed to this voyage. 1 weather reports more for promotion to Captain

USRC Bear

Map and timeline

WINDS	BAROMETERS		TEMPERATURES		State of the Weather, by symbols.	Form of Clouds, by symbols.
	Direction	Force	Height in Inches	True and Air Dry Bulb		
N.E. by N	3	29.64	40.27	27.32	ocf	com
	2-3	29.64	40.27	27.32	ocf	f
	2-3	29.64	38.27	27.20	ocf	

I've finished with this page

Logbooks

Original United States' vessel logbooks are available for public viewing at the National Archives in Washington, D.C. and in College Park, Maryland. As logbooks are digitized during the course of this project they will also be made available online. Follow the links below to find out more.

© 2010 RAL Space

THE ROYAL OBSERVATORY GREENWICH PRESENTS

SOLAR STORMWATCH

WHY SCIENTISTS NEED YOU
MISSION BRIEFING
SPOT & TRACK STORMS
TALK ABOUT IT

Solar scientists need you!
Help them spot explosions on the Sun and track them across space to Earth. Your work will give astronauts an early warning if dangerous solar radiation is headed their way. And you could make a new scientific discovery.

GET STARTED

WHY SCIENTISTS NEED YOU
Watch our solar scientists explain why your contributions are vital, and find out what they're doing with your results behind the scenes.

WATCH VIDEOS

MISSION BRIEFING
Explore our interactive mission briefing to get up to speed with solar science, zoom in on the STEREO spacecraft and meet our science team.

VISIT MISSION BRIEFING

Featured member
Jo Echo Syan
Member since: February 2009

The cool thing is, I am welcome, allowed to ponder, be amazed and explore not only a subject previously inaccessible to me, but it has also enabled me to respond and take a new approach to my work as an Artist

Achievements

Internet | Protected Mode: On | 100%

QUESTION

When did the front of the solar storm get to the dotted halfway line in the STEREO Ahead camera?

INSTRUCTIONS

Play the video until the front of the solar storm is roughly at the dotted halfway line. Then use the nudge **FORWARD** and **BACK** buttons to find exactly when the storm reached it. Press the **HALFWAY NOW** button to record your answer.

If you think there is more than one solar storm in this clip, just pick your favourite. You'll get a chance to record another one at the end.

Remember, solar storms begin from the outside edge of the cameras, and move towards the middle.

Watch a *How to...* screencast.

HOW TO...
SPOT A SOLAR STORM
(1) 3:58

HOW TO...
SPOT A SOLAR STORM
(2) 4:01

Extra info

What's the point of this measurement?

First we're asking you to mark when your solar storm gets halfway across the camera. Next you'll get to spot when it first appears. From these measurements we can make a rough estimate of its speed and, if you're making measurements in both cameras, its direction.

YOUR ANSWER

STEREO AHEAD

HALFWAY NOW

Internet | Protected Mode: On 100%

WHAT'S THAT?

QUESTION

Can you spot comets, particle strikes or anything else interesting?

INSTRUCTIONS

Watch the video. If you spot something, pause it, then use the nudge **FORWARD** and **BACK** buttons to find the frame when it's most visible. Then press the relevant **RECORD** button in the answer section.

Want to double-check what each feature should look like? OK.



Comet



Particle strike



Optical effects

[See more examples on Flickr.](#) (opens in a new window)

It's ok if something appears more than once, just record both times it appears.

You can record more than one type of feature per video clip.

Watch a *How to...* screencast.

HOW TO...
PLAY WHAT'S THAT?
3:54

Extra info

YOUR ANSWER

COMET

RECORD

PARTICLE STRIKE

RECORD

OPTICAL EFFECT

RECORD

SOMETHING ELSE

RECORD

NOTHING TO SEE

Internet | Protected | Double click to change security settings

SOLAR STORMWATCH

- HOME
- WHY SCIENTISTS NEED YOU
- MISSION BRIEFING
- SPOT & TRACK STORMS**
- TALK ABOUT IT

INCOMING!

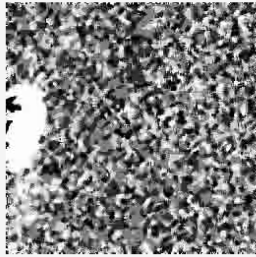
QUESTION

Can you spot a solar storm starting?

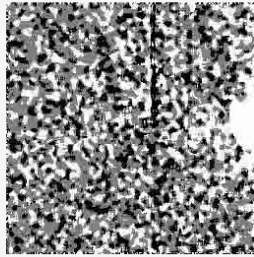
INSTRUCTIONS

This is the very latest data — updated every hour using the spacecrafts' 'beacon mode' transmission. Watch this pair of videos and see if you can spot a solar storm starting on the outside edges. If you do, tell us if it's in just one camera or both.

STEREO BEHIND



STEREO AHEAD



PLAY



PAUSE



SCAN



★ ADD CLIP TO FAVOURITES Time - 23.20

? Hints & tips

What does a solar storm look like in this near real-time data? [Here's a typical shot.](#)

[See more examples on Flickr.](#) (opens in a new window)

A solar storm event is one that goes more than a third of the way across the camera's view. To find out if it starts in the video too, try tracing it backwards.

Think you can spot the tail-end of a solar storm but not the start? Just ignore it — we're on the hunt for new solar storms here.

Watch a *How to...* screencast.

HOW TO...
LOOK AT
REAL-TIME
DATA 2:57

i Extra info

Instrument: Heliospheric Imager 1 (HI1)

My Solar Stormwatch

Log out

SOLAR STORMWATCH

- HOME
- WHY SCIENTISTS NEED YOU
- MISSION BRIEFING
- SPOT & TRACK STORMS**
- TALK ABOUT IT

INCOMING!

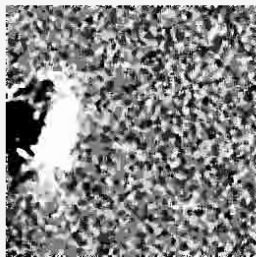
QUESTION

Can you spot a solar storm starting?

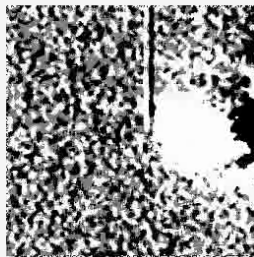
INSTRUCTIONS

This is the very latest data — updated every hour using the spacecrafts' 'beacon mode' transmission. Watch this pair of videos and see if you can spot a solar storm starting on the outside edges. If you do, tell us if it's in just one camera or both.

STEREO BEHIND



STEREO AHEAD



PLAY



PAUSE



SCAN



★ ADD CLIP TO FAVOURITES Time - 24.00

? Hints & tips

What does a solar storm look like in this near real-time data? [Here's a typical shot.](#)

[See more examples on Flickr.](#) (opens in a new window)

A solar storm event is one that goes more than a third of the way across the camera's view. To find out if it starts in the video too, try tracing it backwards.

Think you can spot the tail-end of a solar storm but not the start? Just ignore it — we're on the hunt for new solar storms here.

Watch a *How to...* screencast.

HOW TO...
LOOK AT
REAL-TIME
DATA 2:57

i Extra info

Instrument: Heliospheric Imager 1 (HI1)

My Solar Stormwatch

Log out

SOLAR STORMWATCH

- HOME
- WHY SCIENTISTS NEED YOU
- MISSION BRIEFING
- SPOT & TRACK STORMS**
- TALK ABOUT IT

INCOMING!

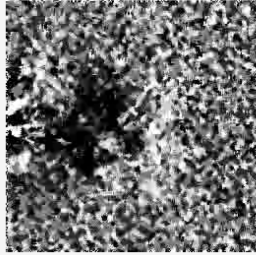
QUESTION

Can you spot a solar storm starting?

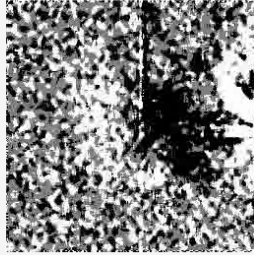
INSTRUCTIONS

This is the very latest data — updated every hour using the spacecrafts' 'beacon mode' transmission. Watch this pair of videos and see if you can spot a solar storm starting on the outside edges. If you do, tell us if it's in just one camera or both.

STEREO BEHIND



STEREO AHEAD



PLAY



PAUSE



SCAN



★ ADD CLIP TO FAVOURITES

Time - 25.70

? Hints & tips

What does a solar storm look like in this near real-time data? [Here's a typical shot.](#)

[See more examples on Flickr.](#) (opens in a new window)

A solar storm event is one that goes more than a third of the way across the camera's view. To find out if it starts in the video too, try tracing it backwards.

Think you can spot the tail-end of a solar storm but not the start? Just ignore it — we're on the hunt for new solar storms here.

Watch a *How to...* screencast.



i Extra info

Instrument: Heliospheric Imager 1 (HI1)

My Solar Stormwatch

Log out

www.solarstormwatch.com

RAL Space

The End