May, 2015

The SECURE News
Statistics of Environmental Change, Resources and Ecosystems

University of Glasgow

In our first newsletter we introduce SECURE, and profile the SECURE team at Glasgow. We introduce our first network event and also feature news and events from other linked networks.

Why do we need SECURE ?

SECURE has been formed to engage with diverse research communities and UK stakeholders to assess and forecast environmental change and to provide statistically robust evidence on environmental change (and its uncertainties). The Engineering and Physical Sciences Research Council (EPSRC) have recognized that mathematical sciences has the potential to deliver improved, modelling and communication tools, and funded four networks, one of which is SECURE. Through SECURE, statisticians, modelers and environmental scientists will work together to provide fresh intelligence and new insights into environmental change. SECURE is funded through the Living with Environmental Change (LWEC) and Mathematical Sciences themes of EPSRC.

SECURE Launch Event

SECURE will hold its first network event on 11th September 2015 at the University of Glasgow. This will be one day meeting, open to all, with a keynote lecture from Professor Ian Boyd, CSA of DEFRA, contributed sessions and a series of workshops designed to facilitate the formation of collaborative projects The event is free and registration will be via Eventbrite:

If you wish to be added to our mailing list for the SECURE newsletter please email the SECURE administrator, Gillian Brown

Launch of SECURE website

Coming Soon
Call for Feasibility Projects

SECURE will commission at least four feasibility projects this year. The projects can be up to six months in duration and up to £**25K**, but applications for smaller projects will also be welcomed. Each project should involve two or more partners from the statistical and environmental communities. There will be a lead academic partner who will be responsible for organization of events and workshops associated with the project, and for reporting outcomes and budget. SECURE will announce its first call shortly, with full details appearing on our website.

EPSRC
Pioneering research and skills

Meet the SECURE Team

Professor Marian Scott: Principal Investigator for SECURE

Marian is Professor of Environmental Statistics at the University of Glasgow since 2000. She   is a chartered statistician, an elected fellow of the International Statistical Institute and in 2005 was elected a Fellow of the Royal Society of Edinburgh. She was until 2006, chair of the Royal Statistical Society Environmental Statistics Section and is a member of the Environmetrcs Society and a trustee of Statistics in Public Resources, Utilities and Environment (SPRUCE). She has published widely, covering topics as diverse as assessing animal welfare, migration of Scythian populations in Eurasia, the distribution of anthropogenic radionuclides in the oceans, promoting physical activity, assessing spatio-temporal trends in air pollutants and modelling water quality.

Professor Susan Waldron: Co-Investigator for SECURE

Susan holds a Chair in Biogeochemistry at the University of Glasgow and leads the Carbon Landscape Research Group within the School of Geographical and Earth Sciences.   For seven years she managed the NERC Scientific Services Life Sciences Community Stable Isotope Facility. From 2002—2007 she was an advanced Research Fellow with NERC. She is co-I on NERC-funded research using natural tracer technologies (isotopes) in the environmental monitoring of unconventional gas extraction and she co-authored the Scottish Government Expert Panel report on Unconventional Hydrocarbons. She led the development of a NERC-funded KE network CLAD (carbon Landscapes and Drainage)

Dr Gillian Brown: SECURE administrator

Gillian took up the current post in February. She has a B.S.c. Hons in Botany from the University of Glasgow and a PhD in Gastroenterology from Birmingham University. She represented Scotland at Badminton   58 times, including two Commonwealth Games. After retiring she worked as Director of Coaching and Development for BadmintonScotland, and then for the NHS as a commercial Research Co-ordinator.

In our next issue, we will introduce the scientific and advisory boards set up to assist in managing the scientific programme of SECURE.

Why We need SECURE cont. from front page

Our vision is to grow a strong statistical and environmental science community with a shared understanding and knowledge of environmental change challenges to inform decision making and to ensure that both communities recognise the benefits of collaborative working and can together advance statistical and environmental science thinking in forecasting and responding to change. In this way the network will address some of the LWEC challenge areas (including ecosystems, resources (including water), health, infrastructure, climate change) underpinned by environmental and earth observation). The network's aim will be realised through organising and supporting a series of feasibility projects, sandpits, workshops and scoping meetings.

In addition to SECURE , the EPRSC funded three other linked networks. Here we feature news from these networks, as well as news from ClimathNet.

ReCoVER (Research on Changes of Variability and Environmental Risk)

ReCoVER aims to encourage research into novel mathematical tools and applications for understanding, predicting and managing the effects of environmental change, in particular where related to climate variability and impacts on societal resilience. **Funding Call now Open: See website for more details** www.recoverlwec.org

Past Earth Network

The Past Earth Network (PEN) goal is to facilitate communication between climate modellers, climate data scientists and mathematicians. The aim of the network is to use past climate data to assess the current uncertainties of climate data and models with a view towards improving climate forecasts.

Past Earth Network opening conference, 1st—4th September, Crew Hall.

Maths Foresees: Mitigating severe environmental events

First meeting: Leeds May 18-20th, 2015 , See website for more details www1.maths.leeds.ac.uk

CliMathNet

CliMathNet brings together Climate Scientists, Mathematicians and Statisticians to answer the key questions around Climate modelling (in particular understanding and reducing uncertainties in observation and prediction). This is an area of science that ranges from numerical weather prediction to the science underpinning the Intergovernmental Panel for Climate Change (IPCC).

CliMathNet Conference, 6th—10th July 2015. The third CliMathNet Conference will be held at the University of Bath. The conference will be based on the theme of numerical weather prediction and data assimilation,.A provisional programme of talks is available at the website. http://www.climathnet.org/conference2015/