# Volcanic & Magmatic Studies Group November '12 Newsletter No. 21





















## FUTUREVOLC – the future of monitoring in Iceland

In October 2012 the latest EU-funded supersite project launched. FUTUREVOLC addresses a call within the Environment program of the 7<sup>th</sup> Framework Programme of the European Commission ("ENV.2012.6.4-2 Long-term monitoring experiment in geologically active regions of Europe prone to natural hazards: the Supersite concept"). The full name of the proposal is

### "A European volcanological supersite in Iceland: a monitoring system and network for the future".

The project will improve scientists' ability to identify and provide early warnings for impending eruptions, to understand in real-time the dynamics of a developing eruption and crucially to provide eruptive parameters to operational agencies in close to real-time thus reducing uncertainty in models of ash dispersal in Europe during future eruptions.



Photo: Eyjafjallajokull 2010 © NERC

#### The objectives of FUTUREVOLC are to:

- Establish an innovative volcano monitoring system and strategy, to achieve best practise in future volcano monitoring, early warnings, data sharing and eruption response at a European level
- Develop new methods and instrumentation for near real-time integration of multi-parametric datasets for

- monitoring magma movements and volcano behaviour before, during and after volcanic crises.
- Apply a trans-disciplinary approach to further scientific understanding of physical processes
- Improve delivery, quality and timeliness of transdisciplinary information from monitoring scientists to civil protection and governing authorities, locally and internationally.

In the FUTUREVOLC consortium 26 partners are involved, with expertise in widely different aspects of volcano monitoring and science. Most partners are working actively on monitoring and modelling for the general purpose of advancing understanding of volcanic and tectonic process. Experts from around the world include: InSAR, GPS and deformation modelling specialists, seismologists, petrologists, geochemists, remote sensing specialists, civil protection and operational institutions.

In the UK, the following organisations are part of the consortium:

- BGS (leading the communication and risk work package)
- University of Cambridge
- UK Met Office
- University of Bristol
- Güralp Systems Limited

The project will run until 2016 and during this time the consortium will collaborate at an international level with other supersites and participate in development technical and common data standards. FUTUREVOLC will contribute to the GEO 2012-2015 Work Plan by providing easy access to monitoring data before, during and after eruptions to assist scientific research and decision-makers from citizens to governments. The project will also contribute to the Disaster Task "Informing Risk Management and Disaster Reduction" on: 1. Disaster management systems, 2. Geohazards monitoring, alert, and risk assessment.

by Charlotte Vye-Brown and Sue Loughlin

#### **VOLCANIC AND MAGMATIC STUDIES GROUP ANNUAL MEETING**

7th - 9th January 2013, University of Bristol

We look forward to seeing many of you at the annual meeting in Bristol in 2013. Please find attached to this newsletter the meeting programme.

#### **VOGRIPA** website launch

MSG

#### http://www.bgs.ac.uk/vogripa

The University of Bristol, British Geological Survey, Smithsonian Institution and partners worldwide in VOGRIPA announce the launch of the official website, which contains a new searchable global database on Large Magnitude Explosive Volcanic Eruptions (LaMEVE). VOGRIPA (Volcano Global Risk Identification and Analysis Project) is a component of the Global Volcano Model (GVM) international collaboration and is endorsed by the International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI).

The LaMEVE database comprises Quaternary eruptions of magnitude 4 and above, and contains data regarding the age, volumes and magnitudes of each eruption, with further data provided for many. The database can be searched via a spatial tool and or a series of attributes, and the results can be viewed online or downloaded for further analysis. Data collation is an ongoing process and we welcome input and comments from the volcanological community, and indeed this is vital to maintain an up-to-date, comprehensive and sustainable database (please email <a href="mailto:vogripa-admin@bristol.ac.uk">vogripa-admin@bristol.ac.uk</a>).

LaMEVE is the first stage in VOGRIPA, with further databases of volcanic hazards and vulnerability being prepared in a collaborative effort with many institutions. These databases are complementary to the Smithsonian's GVP database and will be inter-related to permit the identification of locations at high risk and gaps in knowledge, and to allow scientists and disaster managers to analyse risk within a global context of systematic information.

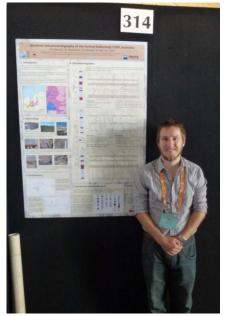
#### Student reports

#### **Peter Marshall**

#### Volcano Dynamics Group, The Open University

The 34<sup>th</sup> edition of the International Geological Congress (IGC) was held in Brisbane in August 2012. With aid from the Volcanic and Magmatic Studies Group UK (VMSG) I was able to present my current research into the Kalkarindji large igneous province with a poster entitled "Borehole Volcanostratigraphy of the Central Kalkarindji CFBP, Australia". I received very positive and

encouraging feedback from several delegates, mostly



impressed with my ability to create a comprehensive stratigraphy from core chips collected from archives at Geoscience Australia. I believe my presentation has increased the profile of Kalkarindji to the wider scientific community.

Overall I found the conference extremely beneficial to my career development as a researcher, allowing

me to see how others have approached similar research to my own, and also to expand my horizons by experiencing other aspects of tectonic and magmatic research. Having attended a meeting for the Large Igneous Provinces (LIPs) working group of IAVCEI, I have made some good contacts within my field of research, which hopefully can form profitable collaborations in the future.

#### **VMSG Distribution List**

The VMSG mailing list is managed by jisc-mail. As a list member you can subscribe to the list or change all your details yourself by subscribing to jisc-mail.

How to join or leave the group? Go to the group homepage at <a href="www.jiscmail.ac.uk/vmsg">www.jiscmail.ac.uk/vmsg</a> and choose the 'Subscribe or Unsubscribe' link from that page. You will receive a confirmation email which you will need to respond to.

#### **Editorial**

Please forward any articles, comments or notices of events, workshops and conferences before 25<sup>th</sup> January '13 for inclusion in the next newsletter.

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