Message from the board

Let us begin 2016 with an apology for the belatedness of this newsletter, 2015 was a busy year! As we look forward, 2016 and beyond undoubtedly present exciting opportunities for GVM. It has been 12 months since the GAR15 report was launched and since the new 30-year UNISDR framework for disaster risk reduction was agreed. The success of GVM’s collaborative contribution to the UNISDR process is widely regarded and it is from this platform that we move forward to strengthen our network, enhance the GVM brand and develop opportunities for network members.

Building on this collaborative approach we would like to encourage leadership of global scale endeavours across the GVM network. Examples of some recent initiatives are presented in this newsletter.

News
- GVM business plan submitted to NERC
- Constitution for GVM
- New logo and rebranding of GVM coming in 2016
- Opportunities to join new GVM working groups
- Meetings: UNISDR’s Science and Technology Conference, Understanding Risk Forum and CoV9

2015 HIGHLIGHTS

<table>
<thead>
<tr>
<th>UNISDR Sendai Conference</th>
<th>Book on Global Volcanic Hazards and Risk</th>
<th>GVM Business Plan</th>
</tr>
</thead>
<tbody>
<tr>
<td>A number of GVM members and partners attended the Third UN Conference on Disaster Risk Reduction (WCDRR) Platform for Disaster Risk Reduction, held in Sendai, Japan, in March.</td>
<td>The GAR15 contributions have been published in a Cambridge University Press open access book: Global Volcanic Hazards and Risk. As of November 2015, the book had been downloaded 732 times. There have also been 174 hard copies purchased. The GAR15 contributions remain GVM’s most significant contribution to disaster risk reduction to date and are a fantastic achievement!</td>
<td>We are very pleased to announce that the business plan to NERC to support the development of a business model for the sustainability of GVM into the future has been submitted. The board will shortly begin to draft a constitution for GVM, which will reflect GVM’s purpose and mission. A constitution will allow us to set out fundamental principles regarding how GVM is operated and governed. It will also serve as a necessary document should GVM move to a more formal structure, such as a charitable status, in the future.</td>
</tr>
<tr>
<td>Steve Sparks attended the Sendai Framework meeting and presented to results of the GVM assessment of global volcanic hazards and risk to a session on the UN ISDR Global assessment Report (GAR15). He also promoted the CUP book at the ICSU booth.</td>
<td><a href="http://www.cambridge.org/volcano">http://www.cambridge.org/volcano</a></td>
<td></td>
</tr>
</tbody>
</table>

Find out more

globalvolcanomodel.org

Contact us

Professor Steve Sparks, University of Bristol
steve.sparks@bristol.ac.uk
Dr Sue Loughlin, BGS-NERC, sclou@bgs.ac.uk

If you would like to submit text for the next newsletter (June), please email Dr Melanie Duncan, BGS-NERC
md@bgs.ac.uk

www.globalvolcanomodel.org
Smithsonian’s Global Volcanism Program plans to launch web services that will allow computer systems throughout the GVM network and beyond to access GVP’s basic data.

With funding from NASA (PI Matt Pritchard, Cornell), the VOTW will expand to include deformation information established through the GVM deformation task force and funded by a number of initiatives, including COMET (Juliet Biggs, UoB). With funding from the Alfred P. Sloan Foundation (PI Elizabeth Cottrell, Smithsonian), the VOTW will expand to include volcanic emissions data. The latter project is part of a larger initiative of the Deep Carbon Observatory to create an online volcanic emissions database through the DECADE portal. While DECADE seeks to create a portal to a broad array of emissions data, GVP’s commitment is to maintain remote sensing SO₂ emissions data in collaboration with Dr. Simon Carn at Michigan Technological University.

This service will allow GVM partners, such as VOGRIPA and WOVOdat, to automatically synchronize their database efforts with the data “backbone” that GVP provides to the international volcanological community. Web services will allow GVP to facilitate third party use of VOTW’s basic volcano, eruption, and emissions data. The VOTW expansions and web services are expected to become available to the community in 2016 or early 2017.

LaMEVE

Version 3 of the Large Magnitude Explosive Volcanic Eruptions (LaMEVE) database was released in September 2015 (www.bgs.ac.uk/vogripa). This update includes: removal of close to 500 volcanoes in consultation with the GVP as they were identified as either duplicates or deemed to have no Quaternary age activity; new eruptions have been added up to 2014, and existing eruptions updated following new literature; all dating quality indices have been completed; and magnitudes for all Japanese eruptions have been re-calculated using literature-sourced volumes. Please contact Sarah Brown (sarah.k.brown@bristol.ac.uk) if you have any questions, new data or would like a database download.

Between 27th and 29th January, the UNISDR hosted a meeting of over 1000 scientists, policy makers and practitioners in order to determine how the global scientific community will support the implementation of the SFDRR. Melanie Duncan (BGS) presented a poster in work stream 1: Scientific and technical partnerships to support the implementation of the Sendai Framework. The purpose of the conference was to promote and support the availability and application of science and technology to decision-making in Disaster Risk Reduction.

The role of scientific partnerships and networks for mobilising science was heavily emphasised during the meetings. Through our growing understanding of the international landscape, we have identified a number of ways GVM’s innovative network-based approach can contribute to the SFDRR, including informing discussions on the use of data, data standardisation/harmonisation and the associated ethical implications, facilitation to enable effective communication between scientists and a number of stakeholders, capacity and advocacy on behalf of local monitoring institutions; and ensuring volcanic hazards are integrated within multi-hazard risk assessments at local, national, regional and global scales.

To find out more about the conference, see the website:
http://www.unisdr.org/partners/academia-research/conference/2016/
VolFilm

A new project facilitated through GVM in which volcanologists and film makers from around the world are developing multi-lingual and multi-platform films for resilience to risks from volcanic hazards. This project is led by Steve Sparks (UoB) and Phase 1 is largely funded through the Challenge Fund of the World Bank’s GFDRR and the UK Department for International Development (DfID). Phase 1 is a pilot study, during which four short films will be developed on the hazards and impacts of pyroclastic flows and lahars. We are very grateful for the response to our request for footage that we have received from the global volcanological community. The use of the films will be evaluated in a number of settings in early Summer 2016. If you have any footage that you would like to share for use in this project, please email Sarah Brown (UoB; sarah.k.brown@bristol.ac.uk).

Volcanic hazards, disaster risk and development in East Africa

In February, three members of the BGS Volcanology Team visited Ethiopia to discuss collaboration on volcanic hazards research and identify requirements for volcanic hazard information and products. The trip included discussion of a recent GVM contribution to a World Bank initiative to investigate national disaster risk profiles for Sub-Saharan Africa. A multi-institutional team involving partners from the British Geological Survey and the University of Bristol, with additional input from the Universities of Addis Ababa and Oxford, looked at ways to assess volcanic risk in Sub-Saharan Africa, particularly in Ethiopia, Uganda and Kenya. The trip to Ethiopia allowed discussion of results with Addis Ababa University, the Geological Survey of Ethiopia and the National Disaster Risk Management Commission. Assessment of volcanic activity and hazard in Ethiopia continues with the NERC-funded RiftVolc project, which aims to bring together information from past eruptions and current activity to provide information on possible future events.

LOOKING TO THE FUTURE

GVM began as a Natural Environment Research Council (NERC) funded research project with the aim of building a sustainable and accessible information platform on volcanic hazard and risk. We have since expanded into a network of institutions working on volcanic hazards and risk and have matured our goals. With so many international initiatives and platforms being discussed, we thought it helpful to revisit the approach and role of GVM.

Our goals are:

- To inspire and enable a global effort to build resilience to, and reduce the disaster risk associated with, volcanic hazards.
- To create a credible, sustainable and accessible information platform on volcanic hazards and risk.
- To provide systematic evidence, data and analysis of volcanic hazards and risk on national, regional and global scales.
- To work with volcano monitoring institutions to implement the best science and DRR strategies and develop capabilities to anticipate future volcanism and its consequences.

www.globalvolcanomodel.org
GVM is well placed to meet the interrelated global challenges of risk reduction and sustainable development; it is therefore sensible that GVM strategically aligns itself in this space. GVM includes existing international professional networks initiatives: IAVCEI, WOVO and GVP all of whom are represented on the GVM Management Board.

Working on small, short-term projects has proven to be a successful model for how the network can operate. Looking forward, we should be identifying ambitious goals for when funding opportunities arise. A key role of GVM going forward is providing input and evidence into global dialogues, assessments and frameworks for disaster risk reduction associated with volcanic hazards. Proposed science, research and DRR objectives are to:

1. Create and maintain a globally accessible integrated global database system on volcanic hazards and risk, integrating where possible with existing initiatives;
2. Develop methods and tools, including models, to anticipate, assess and analyse volcanic hazards and risk;
3. Create a unified volcanology global voice in the implementation of disaster risk reduction, including the Sendai Framework for Disaster Risk Reduction (SFDRR), enabling all sectors to better account for and anticipate the impacts of volcanic activity;

The priorities for the next 12 months include building on existing work and successes, e.g. through continued contribution to the UNISDR Global Assessment Report process and national scale risk projects; developing the GVM brand; continuing to support workshops and secondments to share knowledge, build consensus and capacity; developing a constitution; marketing GVM’s goals, values and principles; and continuing to identify alternative funding streams and models.

Most importantly, we want to hear from you! The success of GVM to date is a direct reflection of the strength of the network. By coordinating resources across the network we are better positioned to meet our objectives.

Calling all designers!
One of the major goals for the next few months is to rebrand and market GVM. Several new logo ideas (as alternative to the one at the top of the newsletter) have been proposed, including:

If you have any ideas for alternative logos or feedback on the above two suggestions, please send to Sarah Brown (UoB, sarah.k.brown@bristol.ac.uk) by Friday 15th April. Graphic designers will help polish the chosen design.

Invitation to join two new working groups
The Sendai Framework calls for greater anticipation of hazards and disasters. Linked to some recent work NERC-BGS have been involved in for the UK, GVM would like to establish a working group on global reporting of volcanic activity. The terms of reference of the group are yet to be defined, but are envisaged to include:
1. Identifying the users of volcano activity reports
2. Identifying the synergies and addressing the gaps in reporting methods
3. Networking and sharing reporting communication methods
4. Communicating the status and changes in volcanic activity to end users

Please contact Melanie Duncan (md@bgs.ac.uk) if you would like to join.

Our activities and market research to date have identified that a variety of users, including the (re-)insurance sector are eager for the development of scenarios of potential volcanic impacts. If you are interested in this or have an idea for a GVM working group or area to be addressed, please contact the GVM board (sclou@bgs.ac.uk).

www.globalvolcanomodel.org
<table>
<thead>
<tr>
<th>Upcoming meetings</th>
<th>Anticipating the next UNISDR contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Understanding Risk Forum, 16-20 May, Istanbul, Turkey.</strong></td>
<td>It is likely that there will soon be a call for another contribution to a global assessment of volcanic hazards and risk for the UNISDR. It is critical that we maintain and enhance the global assessment of volcanic hazards and risk within the UNISDR assessments. We are therefore looking for volunteers to coordinate the task force for the GAR17 (or equivalent).</td>
</tr>
<tr>
<td>Calls for session proposals have closed, however, BGS aim to represent GVM at this forum. If you are planning to attend, please let Melanie Duncan (<a href="mailto:md@bgs.ac.uk">md@bgs.ac.uk</a>) know so we can plan a coordinated GVM presence.</td>
<td>If you would like to coordinate or have a coordinating role, or have ideas for how to evolve our contributions to the GAR process, please contact the GVM management board (<a href="mailto:sclou@bgs.ac.uk">sclou@bgs.ac.uk</a>).</td>
</tr>
<tr>
<td><strong>COV9, 20 – 25 November, Puerto Varas, Chile.</strong></td>
<td>GVM requires long-term funding to become sustainable. Organisations and funding agencies interested in the objective of reducing volcanic risk around the world are encouraged to consider sponsorship.</td>
</tr>
</tbody>
</table>
| GVM members are planning to host a two-day workshop on data before the conference. For more information please contact Ben Andrews (SI) [AndrewsB@si.edu]. It would be great for GVM to have a strong presence at CoV9, so please let us know if you plan to lead a GVM related initiative, presentation or other activity at CoV. | Find out more at [globalvolcanomodel.org](http://www.globalvolcanomodel.org).

**Contact us**

Professor Steve Sparks, University of Bristol  
steve.sparks@bristol.ac.uk

Dr Sue Loughlin, BGS-NERC, sclou@bgs.ac.uk

If you would like to submit text for the next newsletter (June), please email Melanie Duncan, BGS-NERC  
md@bgs.ac.uk