



Cities and Volcanoes Commission

NEWSLETTER: September 2007



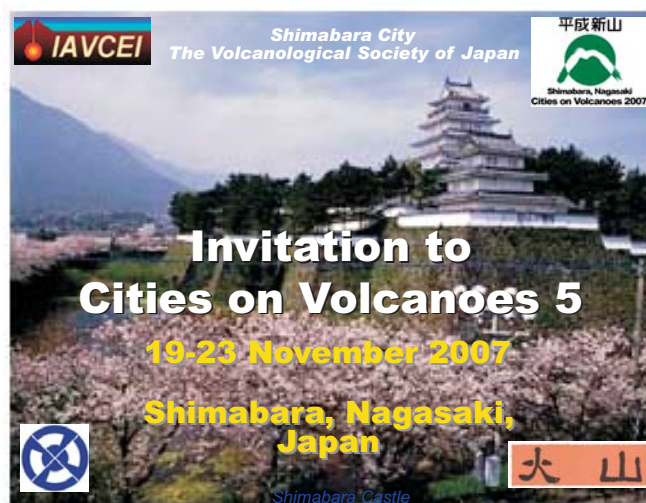
Cities and Volcanoes Commission

The Cities and Volcanoes Commission aims to provide a linkage between the volcanology community and emergency managers, to serve as a conduit for the exchange of ideas, and to provide a means to share experience between "volcano cities". It also aims to promote multi-disciplinary applied research, involving the collaboration of physical and social scientists, and city officials.

The Commission is open to all IAVCEI members with no charge for membership. We aim to develop a close link with the International Volcano Health Hazard Network (IVHHN), World Organisation of Volcano Observatories (WOVO) and Commission on the Mitigation of Volcanic Disasters.

<http://cav.volcano.info>

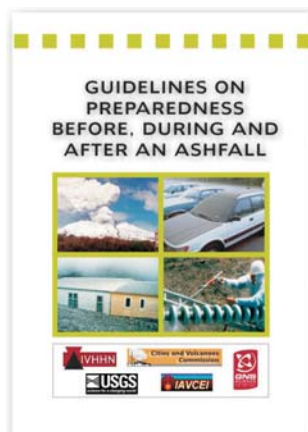
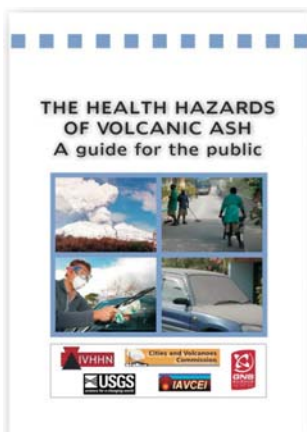
Count down to CoV5



www.citiesonvolcanoes5.com

New volcanic hazard guidelines Released

Two sets of pamphlets have recently been published by International Volcanic Health Hazard Network (IVHHN), in association with USGS, IAVCEI's Cities and Volcanoes Commission, GNS Science and the Joint Centre for Disaster Research. The first pamphlet is a guide for the public on the health hazards of volcanic ash. The second is for the public and emergency managers on guidelines for preparedness before, during and after an ashfall.



Copies can be ordered in multiples of 50 from IVHHN. Free downloadable versions are also available on the IVHHN website (www.ivhnn.org). Currently they are available in English. The Spanish and Japanese versions will be available by November 2007 on the IVHHN website, with Italian and French soon after. If you would like to have the pamphlets in your language, please contact IVHHN (contact details on the website; www.ivhnn.org).

To all members of the IAVCEI Commission: Mitigation of Volcanic Disasters

There will be a meeting to discuss the future of the IAVCEI Commission for the Mitigation of Volcanic Disasters at the November CoV meeting in Shimabara. At the meeting we will consider a change of leadership, as well as the possibility of introducing a fixed term of leadership. If anyone is interested in becoming Commission leader they should contact us before mid-November, or attend the Commission meeting in Shimabara (time and venue to be announced).

Giovanni Orsi orsi@ov.ingv.it
Claus Siebe csiebe@tonatiuh.igeofcu.unam.mx
Jan Lindsay j.lindsay@auckland.ac.nz



Vesuvius

Issue 2007/6: September 2007

Where are the people?

By Ilan Kelman <http://www.ilankelman.org>

Volcanology continues to contribute to and learn from research, policy, and practice related to other environmental phenomena, including floods, earthquakes, tornadoes, and tsunamis. In fact, due to the fascinating variety of phenomena which volcanoes produce, overlaps are inevitably present. Studies on pyroclastic flows picking up loose objects in a city inform and learn from wind storm studies. Lahar and jökulhlaup damage has direct analogues to flood damage.

In such exchanges, volcanology can also learn from others' mistakes. At one recent conference, I heard an American presenter explain that a good example of recovery in Thailand after the 26 December 2004 tsunami was that the Starbucks was open in his case study site. I suggested that the lack of local livelihoods and the reliance on external income could perhaps be contributing factors to the root causes of vulnerability which caused the tsunami disaster in the first place. His response: "I don't mind a Starbucks in Thailand". But what about the Thais? Especially those who moved to the coast in order to serve tourists and were thus vulnerable to the tsunami.

I have seen colourful PowerPoint presentations extolling the virtues of detailed GIS maps for analysing critical infrastructure vulnerability – without mention of schools and hospitals. One GIS-based loss model for earthquakes and floods did not include deaths and injuries because, according to the presenter, casualties were too difficult to consider, so they were assigned a loss value of zero.

For society, a disaster does not happen without disruption to people, communities, and/or livelihoods – or elements of those, including infrastructure and buildings. We must never forget that the innovative work and challenging practical situations inherent in volcanology contribute directly to making people, communities, and livelihoods safer. In our work, they should never be far from our thoughts.

Volcanic Impacts Database: web site

Ash-Impacts Website

<http://volcanoes.usgs.gov/ash/>



Yakima, USA 1980.

Field Work on Risk Assessment in a Volcanic Context, Isola di Vulcano, Aeolian Islands, Italy

This year the University of Geneva hosted its 20th annual 9-week training course on geologic risk assessment and management for international students and practitioners (Certificat de formation approfondie en Etude et management des Risques Géologiques - CERG). For the tenth year a 1-week field exercise was held on the island of Vulcano, Italy, to study geologic risk in the context of volcanic hazards. The island of Vulcano, part of the Aeolian Island arc north of Sicily and Mount Etna, experienced its last eruption in 1888-90, but more recently volcanic unrest occurred in the 1980s and 1990s. Four modules were included in the project at Vulcano: physical volcanology (instructors: Mauro Rosi, University of Pisa and Costanza Bonadonna, University of Geneva); physical, functional and systemic vulnerability (instructor: Daniela Molinari, Politecnico di Milano); social vulnerability (instructor: Chris Gregg, East Tennessee State University), and Economics (instructor: Franco Romerio, University of Geneva). Two major differences between this year's exercise and previous exercises were the participation of the Italian National Civil Protection Agency (CPA) and inclusion of social factors in the estimate of risk. Students were challenged to integrate their findings on hazards, vulnerability, economics and social factors to develop a more comprehensive evaluation of risk on the island.



Above: The 2007 CERG team in Porto di Levante, Isola di Vulcano, Italy. From left to right are: Hasan Ozdemir, Vittorio Bosi, Tullio Ricci, Costanza Bonadonna, Franco Romerio, Mauro Rosi, Licia Costantini, Audrey Camacho Villegas, Deanne Bird, Jose-Manuel Rodriguez, Souad Chikh Zetoutou, Carolina Garcia Londono, Daniela Molinari, Nazi Dilekli, Joao Carlos Batista Lopes, Klodian Zaimi, Mauricio Tagliaferro, Lina Maria Ospina Ostios and Fabrizio Alfano (story and photograph by Chris Gregg, GREGG@mail.etsu.edu).

New Zealand Mt. Ruapehu eruption, June 1996



Photo by Lloyd Homer. GNS Science Photo Library, www.gns.cri.nz

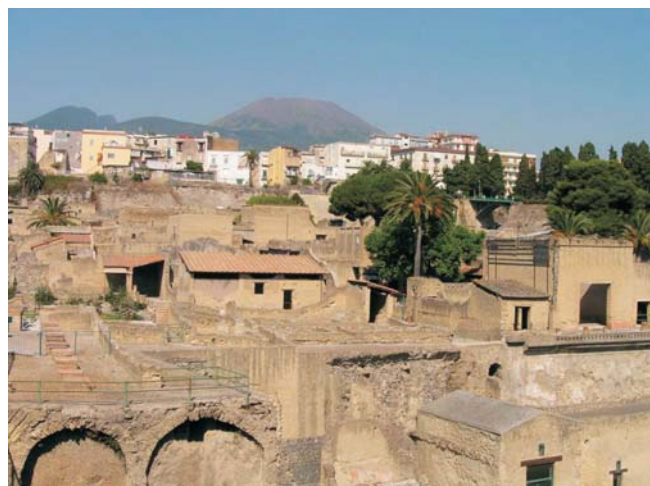
IUGG Perugia 2007 and a visit to Naples, that quintessential City on a Volcano

Jan Lindsay

The 2007 IUGG meeting was held between the 2nd and 14th July in the beautiful town of Perugia, Italy. It coincided exactly with the International Umbria Jazz festival, which was both a blessing and a curse: a blessing as it provided a vibrant, music-filled setting with plenty of opportunities for evening entertainment, but a curse due to the drain on accommodation resulting in most people being housed quite far away from the conference venue.

There was a strong IAVCEI representation at the conference, and several symposia of interest to CaV commission members, in particular Methodologies and Applications of Volcanic Hazard Evaluation, Quantifying and Expressing Volcanic Risk, and the Cities on Volcanoes symposium itself. Of particular interest to me were the numerous talks describing (Bayesian) event trees of one form or another, and how these can be used as tool to aid in many situations ranging from evacuation decision making (talks by Woo, and Baxter et al.) through eruption forecasting (Marzocchi et al., Marzocchi and Sandri) to assessing risk to volcanologists working on live volcanoes (Jolly and Scott). These event trees are proving to be very useful tools – and I am sure we will be seeing them used more and more in the future.

A big disappointment for many people was finding out at the meeting that most of the IAVCEI field trips had been cancelled. Several of us who had registered for the Vesuvius/Campi Flegrei trip decided to organise our own informal trip, and spent a few fantastic days exploring Pompeii and Herculaneum (Roman cities buried during the 79AD eruption of Vesuvius) and Vesuvius itself. It was sobering to see the ruins of Herculaneum overlain by the modern day Ercolano, with a 10-20 m thick volcaniclastic deposit in between. Also



The ruins of Herculaneum overlain by the modern day Ercolano, with a 10-20 m thick volcaniclastic deposit in between; Vesuvius in background.

sobering was the proximity of Naples to Vesuvius; although I have to say, the risk of getting killed crossing the busy Neapolitan streets seemed far greater than anything the volcano could throw at us.

Surprising to me was the fact that, amongst all the mosaics, frescos, sculptures and paintings preserved at the Pompeii and Herculaneum ruins and in the archaeological museum, I did not see one single rendition of Vesuvius. It seems the residents were far more interested in the flora and fauna of the Nile than the mountain in their backyard.

The organised minivan trip up Vesuvius was a truly on-the-edge-of-your-seat experience. Again, the threat of the volcano paled in comparison to the threat of death at the hands of our mad driver, who overtook on blind corners and sped all the way up the winding roads. Our short walk from the car park to the crater's edge took us past several large souvenir stalls and hundreds of other volcano tourists, and it was reassuring to see monitoring equipment peeking out from behind rocks at various locations.

The Neapolitan area is a wonderfully vibrant and chaotic place, but I do not envy our Italian colleagues responsible for managing volcanic risk!

Jan Lindsay's trip was supported by the CaV commission



A street in Pompeii (note the chariot marks!) with Vesuvius in the background.

Protocol for selecting venues for the CoV 6 meeting

Background

To date there have been four "Cities on Volcanoes" meetings. The purpose of these meetings is to bring together volcanologists, city authorities, sociologists, psychologists, emergency managers, economists and city planners to evaluate volcanic crises preparedness and management in cities and densely populated areas. In 1995 the "Volcanoes in Towns" meeting was held in Rome, Italy. From that developed the first "Cities on Volcanoes", held in June-July 1998 in Rome and Naples, Italy with over 100 people attending. This was followed by the second in February 2001 in Auckland, New Zealand with 220 people attending and the third in Hilo, Hawaii in July 2003 with 300 attending. The fourth meeting was in Quito, Ecuador in January 2005, with the largest attendance to date. The fifth meeting is planned for Shimabara, Kyushu, Japan, November 19-23, 2007.

Future Planning

The venue for the next "Cities on Volcanoes" meeting (likely to be held in 2009 or 2010) will be selected by a Committee of the Cities and Volcanoes Commission. Formal written proposals are called for and must briefly outline:

- dates
- venue for conference
- locality (e.g. volcano characteristics, activity, exposed population, vulnerability, etc)
- transport options for international attendees
- programme ideas (e.g. speakers, field trips)
- logistics and handling of these by the host country
- potential sponsorship
- preliminary estimates of the intended registration fees.

The Commission will consider the initial proposals and may seek further details from those countries with the most suitable venues.

The Commission will announce the next venue at the 2007 "Cities on Volcanoes 5" meeting in Shimabara.

The Commission will assist the hosting country where possible but organisational and financial responsibility rests with the host.

Important dates for the selection of Cities on Volcanoes 6:

January, 2007

Formal call for nominations for hosting CoV6

July 31, 2007

Deadline for nominations for hosting CoV6

October 1, 2007

Deadline for written proposals for hosting CoV6

October 14, 2007

Deadline for further information requests by Commission

November 1, 2007

Deadline for further information submissions

November 20, 2007

Meeting of the executive committee of the Cities and Volcanoes Commission to decide venue of CoV6

November 23, 2007

Venue for CoV6 announced

2008 IAVCEI General Assembly, Reykjavik, Iceland 8th to 25th of August 2008

On behalf of the Icelandic Geological Society, we invite the international scientific community to participate in the 2008 IAVCEI General Assembly to be held in Reykjavik, Iceland, from 18th to 25th of August. The main theme of the meeting will be "Understanding Volcanoes". The meeting is devoted to volcanism and volcano-tectonics of all environments and the impact of volcanic eruptions on the surface environment and human activities. We also offer a variety of short intra-meeting as well as extended pre- and post-meeting field excursions under the umbrellas of Ocean island volcanism.

Iceland is the only place on Earth where you can literally take a stroll along a mid-ocean ridge system and walk into the domain of hot spot activity. Icelandic volcanism is remarkably diverse, including effusive and explosive basaltic eruptions as well as large rhyolitic plinian eruptions.

A society of about 300,000 inhabitants largely benefits from the volcanic activity, because 95% of all houses in Iceland are heated by geothermal water, making it the largest geothermal society in the world. The meeting will be held in August, which is characterized by mild weather and extended days (nightfall at 22.30). The meeting venue is at the University campus in the heart of Reykjavik, a city renowned for its spas and night life. Reykjavik is an excellent place to host the IAVCEI General Assembly in 2008.

Important dates

First circular : December 2006 (pdf file)

Second circular: June 2007

Abstract deadline: February 2008

Early registration: April 2008

Meeting: 18-25 August 2008



Snæfellsjökull volcano, Iceland

Next newsletter

December 2007: Please send short news items or information to david.johnston@gns.cri.nz by 7 December 2007.