# CITIES ON VOLCANOES 5 CONFERENCE

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## TOPICS

#### Session 1-1: Recent developments in volcano research

Oral presentations Tuesday afternoon conclude by examining chiefly surficial processes, including pyroclastic flows, lahars, volcanic tsunamis, lava domes, lava flows, tephra falls, and the session ends with a discussion on the evolution of effusive silicic eruptions. Poster sessions on Monday and Tuesday focus on Unzen volcano, mass flow processes, gas-hydrothermal activity, tephra, geophysical studies, and eruption histories.

### Session 2-1a: Responding to natural Disasters: Case histories with lessons for volcano crises

The session brings real-world volcanic crises experiences from the perspective of scientists, emergency and aviation responders, and journalists. Our keynote discusses a broad set of disaster experiences and the lessons we need learn from them, before starting our first series of case histories: using simulated exercises to prepare for eruption response (Italy); dealing with multiple natural hazards simultaneously (Indonesia); and lessons learned from 25 years of volcanic ash and aviation encounters (Australia). Next, we focus on crisis management in Japan, with particular emphasis on evacuations, including two case histories and details of a new evacuation system. Tuesday ends with journalist's insights into public perceptions of risk (Japan and Mexico).

#### Session 2-2: Impacts of volcanic activity on infrastructure and effective risk reduction strategies

The aim of this session is to discuss vulnerability/risk assessment measures/strategies to mitigate hazard from volcanic activities through worldwide examples by one plenary talker and fourteen oral presenters, also 22 posters. At first in the morning session, Dr. Ikeya will present a plenary talk. His topics are actual disasters and responses during volcanic eruption of Unzen Volcano to introduce issues and lessons from the disaster. Co-conveners of the session programmed three thematic topics of the session. The sub-session on sediment-related hazard and mitigation measures has 6 speakers from Mexico, Philippine, Indonesia, New Zealand, USA and Japan. The nature and mechanism of lahar, actual disasters, measures and strategy mitigating hazard, assessment and potentiality are topics of this sub-session. In the afternoon, two sub-sessions will be held. One is on evaluation of volcanic risk and hazard mapping. Vulnerability of infrastructures, mapping and risk analysis are topics by 4 speakers from USA, New Zealand, England and Japan. The last sub-session will present analyses of mitigation measures where 4 speakers from Italy, New Zealand and Japan will discuss scenarios, vulnerability analysis of various aspects of infrastructure, and evaluation.

If time is available, we will summarize discussion at the end of the session.

## Session 2-3: Long-term land-use planning that mitigate volcanic risk

Land use planning within the areas of potential hazards is a major aide in lessening the risk to growing communities, although it is rarely implemented. Unfortunately we missed an interesting talk about a long history of land use and the problems in the Kilauea lava field. Instead, a lava field formed by 20 years-ago eruption at Heimaey gives us another story. Replaced plenary talk by Peter Frenzen gives very suggestive lessons after the big eruption at Mount St. Helens in May 1980, where hazard map was used effectively for placing roads and facilities. Importance of hazard mapping for land use planning is verified also in New Zealand, and at Usu for relocations of hospitals and schools. Vulnerability of Metropolitan City Tokyo against ash fall is being posed by future eruptions at Fuji and Hakone. Troublesome deposits of debris flows were used ingeniously by piling up on site for a safe elevation at Unzen, through which communities once destroyed by eruption were rebuilt.

#### Session 3-2: Education and outreach – Strategies that improve community awareness about volcanoes (Poster Session) Education and Outreach--Strategies that Improve Community Awareness about Volcanoes

View more than 30 posters in the session 3.2 "Education and Outreach—Strategies that Improve Community Awareness about Volcanoes." Posters in today's session address effectiveness of communication, cultural responses, citizen disaster mitigation, school education and the role that parks and museums play in raising awareness about volcanic hazards. Find novel approaches, such as an online volcano community education network, ash fall and volcano hazards atlases, a volcano board game, and a broad assemblage of teaching ideas and programs for school students and teachers. There are several informative and pioneering evaluations of community awareness programs.



## NEWS

## New pamphlets published on health hazards of ash and preparedness for ashfall

Two sets of **pamphlets** have been published by IVHHN in association with the USGS, <u>IAVCEI</u>'s Cities and Volcanoes Commission and GNS, New Zealand. 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. The pamphlets are available for mass distribution at the onset of new eruptions. They have being translated into several languages. Currently they are available in English & Japanese. The Spanish, French, Italian and Portuguese versions will be available from December 2007. To order the pamphlets, please visit <u>www.ivhhn.org</u>. You can either order printed pamphlets or request a high-resolution PDF file so that you can print them at your own cost, locally. If you would like to have the pamphlets in your language, please also contact IVHHN.

INFORMATION

## Lunch Time Video Showing (12:00-13:00) at Hall A

# "Montserrat's Andesite Volcano a video field investigation of the eruption of the Soufriere Hills Volcano " produced by Steve Sparks & David Lea (with Japanese narration)

This video is about an andesite volcano, the Soufriere Hills volcano on the island of Montserrat in the Caribbean. The objectives are to tell the story of the eruption, explain the volcanic phenomena and the hazardous effects, and to describe the modern methods of monitoring an active volcano. The Soufriere Hills provide a superb example of island arc volcanism with a remarkable diversity of volcanic phenomena. You will experience great spectacles of nature, including the growth of a large andesite lava dome, pyroclastic flows and surges, explosions, ashfall, a large volcanic landslide and volcanic mudflows. You will learn about the processes that cause andesite volcanism and the geological and geomorphological and human consequences of a major andesite eruption. You will appreciate how modern geophysical techniques that monitor earthquakes, ground deformation and volcanic gas emissions are transforming our understanding of volcanoes and the ability to forecast their behaviour.

2007 Storomboli eruption movie is on air Nov. 20, 16:40 - 18:00 (poster-core time) at Hall A

WOVO meeting & 2nd WOVOdat Steering Committee meeting November 20 (Tue), Day 2 evening -- Tsukumo Hotel: 18:30-22:00 Organized by Warner Marzocchi, Andrew Tupper, and Florian Schwandner

The World Organization of Volcano Observatories (WOVO) will hold two back-to-back meetings tonight, Tuesday Nov 20 at the Tsukumo Hotel:

(1) Regular WOVO meeting (6:30 PM to 8:00 PM)

(2) WOVOdat Steering Committee meeting (8:30 PM to 10:00 PM)

Access to venue:

Shuttle bus from Fukko Arena (conference) to first stop ("Tsukumo hotel") at 18:08 (bus #112H), 20:08 (buses #116H & #118S), or taxi (ask for call at COV5 information desk). Walking is discouraged (takes ca 50minutes).

