

IAVCEI 2013

Scientific Assembly



Program

July 20 (Sat) - 24 (Wed), 2013, Kagoshima, Japan

<http://www.iavcei2013.com/>



Forecasting Volcanic Activity

Reading and translating the messages of nature for society



Hosted by

The Volcanological Society of Japan

Co-hosted by

IAVCEI (International Association of Volcanology and Chemistry of the Earth's Interior)

Kagoshima Prefecture

Kagoshima City

Supported by

Disaster Management, Cabinet Office, Government of Japan, Science Council of Japan (SCJ), Ministry of Education, Culture, Sports, Science and Technology in Japan (MEXT), Ministry of Land, Infrastructure, Transport and Tourism (MLIT), Ministry of Foreign Affairs of Japan (MOFA), Ministry of Economy, Trade and Industry (METI), Ministry of the Environment, Government of Japan (MOE), Japan Meteorological Agency (JMA), Japan Coast Guard (JCG), Geospatial Information Authority of Japan (GSI), Earthquake Research Institute, The University of Tokyo (ERI), Disaster Prevention Research Institute, Kyoto University (DPRI), Kagoshima University, National Research Institute for Earth Science and Disaster Prevention (NIED), Public Works Research Institute (PWRI), National Institute of Advanced Industrial Science and Technology (AIST), Crisis and Environment Management Policy Institute (CeMI), Sabo and Landslide Technical Center (STC), The Geological Society of Japan (JGS), Seismological Society of Japan (SSJ), The Geodetic Society of Japan, Japan Society of Geoinformatics (JSGL), Tokyo Geographical Society, Japan Association of Quaternary Research (JAQUA), The Geothermal Research Society of Japan (GRSJ), Japan Association of Mineralogical Sciences (JAMS), The Society of Resource Geology, The Geochemical Society of Japan (GSJ), Society of Geomagnetism and Earth, Planetary and Space Sciences (SGEPSS), The Remote Sensing Society of Japan (RSSJ), Japan Society of Engineering Geology (JSEG), Japan Society for Disaster Information Studies (JASDIS), Japan Society for Natural Disaster Science (JSNDS), Volcano and volcanic geology Museums Association in Japan, The Asahi Shimbun Company, The Yomiuri Shimbun, THE MAINICHI NEWSPAPERS, Minami-Nippon Shimbun, The Nishinippon Shimbun, NHK (Japan Broadcasting Corporation) Kagoshima Station, Kagoshima Yomiuri Television Corp., KAGOSHIMA T.V. BROADCASTING CO.,LTD., Kagoshima Broadcasting Corporation, Minaminihon Broadcasting Co., Ltd., Kyodo News, JIJI PRESS LTD

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Japan Society for the Promotion of Science

Tokyo Geographical Society

Schedule for the week

July, 2013	AM	PM	Evening
19th (Fri)			Ice breaker 17:00-19:00
20th (Sat)	Opening Ceremony 9:00-9:40 Award Ceremony 9:40-10:30 Award Lecture 10:30-11:15 Keynote Lectures 11:30-13:00	Scientific sessions 14:30-18:15	
21st (Sun)	Scientific sessions 8:45-12:30	Poster core time 13:30-15:00 Scientific sessions 15:00-18:45	
22nd (Mon)	Mid-conference field trip Meeting place of M1 course: Site A (7:45) Meeting place of M2&M3 courses: southwest parking, Kagoshima Chuo station (7:45)		Gala party 18:30-20:30
23rd (Tue)	Scientific sessions 8:45-12:30	Poster core time 13:30-15:00 Scientific sessions 15:00-18:45	
24th (Wed)	Scientific sessions 8:45-12:30	Poster core time 13:30-15:00 Scientific sessions 15:00-16:45	Conference dinner 19:00-21:00

Committees

Organizing Committee

Chair: Toshitsugu Fujii

Vice-chair: Kazuhiro Ishihara

Members:

Toshihiko Hashida, Masato Iguchi, Koji Itoh, Setsuya Nakada, Toshiya Morisawa, Takeshi Oosaka, Takashi Saito, Hidenori Shimomura, Toshikazu Tanada, Kozo Uto, Akihito Yajima

Steering Committee

Chair: Kozo Uto

Vice-Chair: Masato Iguchi

Members:

Eisuke Fujita, Daisuke Fukushima, Jun-ichi Hirabayashi, Hideo Hoshizumi, Setsuya Nakada, Mitsuhiro Nakagawa, Shigeru Nakao, Hiroshi Shinohara, Takahiro Yamamoto, Genji Saito, Akihiko Tomiya, Isoji Miyagi, Akira Takada, Akihiko Yokoo, Takeshi Matsushima, Tomofumi Kozono, Tetsuo Kobayashi, Daisuke Miki, Hiromitsu Oshima, Hiroshi Shimizu, Kohei Kazahaya, Hiroki Miyamachi, Yasuo Ogawa, Yasuaki Sudo, Yosuke Aoki, Yasuhiro Ishimine, Shinji Takarada, Teruki Oikawa, Maki Tsutsui, Nobuo Matsushima, Mitsuru Okuno, Ryusuke Imura, Kenji Niihori, Yuko Okayama, Akihiko Terada, Shigeaki Minami, Kazuhisa Nakano

Honorary Advisers

Shigeo Aramaki, Yuichiro Ito, Kosuke Kamo, Yoshizane Maeda, Kiyoo Mogi, Hiroyuki Mori

Scientific Committee

Chair: Setsuya Nakada (Japan)

Members:

Patrick Allard (France), Ray Cas (Australia), Kathy Cashman (USA)
Jennie Gilbert (UK), Agust Gudmundsson (UK/Iceland), Jun-Ichi Kimura (Japan)
Joan Marti (Spain), Steve McNutt (US), Paolo Papale (Italy), Steve Sparks (UK)

Venue

Site A: Kagoshima Prefectural Citizens Exchange Center

Registration desk (July 19-21, 23-24)
Ice breaker (July 19)
Oral presentation rooms A1-A6 (July 20-21, 23-24)
Speaker ready room (July 19-21, 23)
Internet room (July 19-21, 23-24)
Poster session room (July 21, 23-24)
Exhibition room (July 20-21, 23-24)
Travel desk (July 20-21, 23-24)
Cloak room (July 20-21, 23-24)
Social events "Friends of Volcano Fair"(July 20-21)



Site A is completely close on July 22.

14-50, Yamashitacho, Kagoshima City, Kagoshima Prefecture, Japan 892-0816

Site B: Kagoshima Citizens Social Support Plaza

Oral presentation rooms B1-B2 (July 20-21, 23-24)
Meeting room B3 (July 19-21, 23-24)

*15-1, Yamashitacho, Kagoshima City, Kagoshima Prefecture,
Japan 892-0816
(A five story square building opposite the Site A)



*From JR Kagoshima Chuo Station to the Sites A and B
Taxi: The travel time will be 15 minutes.

Tram: From Kagoshima Chuo Station alight at Shiyakusho-mae (the City Hall) stop, the 8th station, and walk to the center. The tram fare will be 160 yen for adults and the travel time is approximately 30 minutes.

* From JR Kagoshima Station
A 10-minute walk to the Sites A and B.

Houzan Hall

Opening Ceremony (July 20)
Award Ceremony and Lecture (July 20)
Keynote Lectures (July 20)
Workshops (July 19, 25)

*5-3 Yamashitacho, Kagoshima City, Kagoshima Prefecture,
Japan, 892-0816



* From the Sites A and B
A 5-minute walk to Houzan Hall

* From JR Kagoshima Chuo Station
Taxi: The travel time is approximately 10 minutes. Tram: Take the train from Kagoshima Chuo Station and alight at Asahi-dori, the 7th station, and walk to Houzan Hall. The tram fare is 160 yen for adults. The travel time will be approximately 25 minutes.

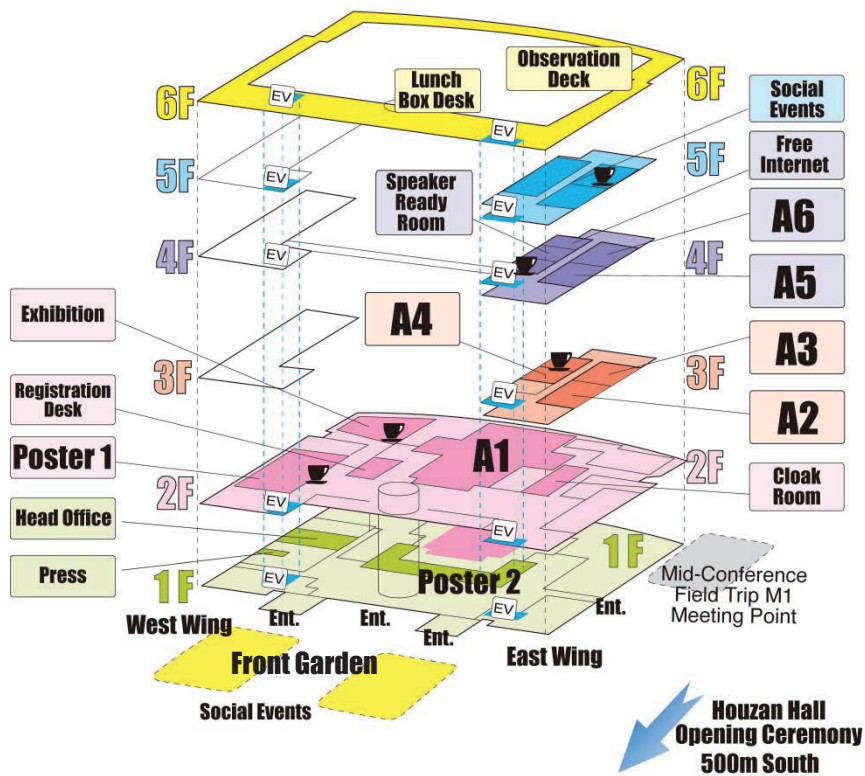
* From JR Kagoshima Station
A 15-minute walk to Houzan Hall.



Floor Map

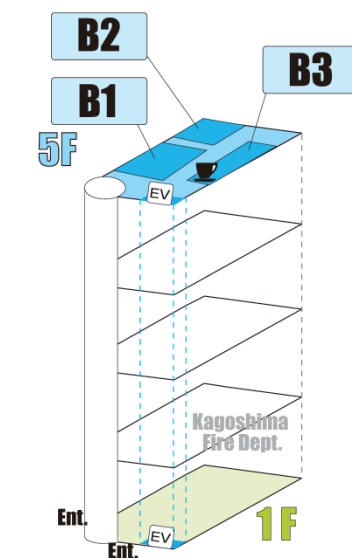
Site A

Kagoshima Prefectural Citizens Exchange Center



Site B

Kagoshima Citizens Social Support Plaza



City Tram
Shiyakusho mae
100m East

Wireless LAN is available
on Site A (1st – 4th floor)
and Site B (5th floor)

		July 19	July 20	July 21	July 22	July 23	July 24
Registration Desk	Site A 2nd Floor	13:00 19:00	8:30 19:00	8:30 19:00	–	8:30 19:00	8:30 13:00
Travel Desk	Site A 2nd Floor	13:00 19:00	8:30 19:00	8:30 19:00	–	8:30 19:00	8:30 13:00
Exhibition	Site A 2nd Floor	–	9:00 18:00	9:00 18:00	–	9:00 18:00	9:00 18:00
Poster Rooms	Site A 1st & 2nd Floor	–	–	8:30 18:45	–	8:30 18:45	8:30 16:45
Speaker Ready Room	Site A 4th Floor	13:00 19:00	9:00 19:00	9:00 19:00	–	9:00 19:00	–
Free Internet	Site A 4th Floor	13:00 19:00	8:30 19:00	8:30 19:00	–	8:30 19:00	8:30 17:00
Cloak Room	Site A 2nd Floor	–	10:00 19:00	8:30 19:00	–	8:30 19:00	8:30 17:30
Lunch Box Desk	Site A 6th Floor	–			–		
Social Event "Friends of Volcano Fair"	Site A Front Garden	–	10:00 16:00	10:00 16:00	–	–	–
	Site A 5th Floor	–	10:00 20:00	10:00 20:00	–	–	–

Party

Ice breaker

July 19, 17:00-19:00

Front Garden of Site A (Kagoshima Prefectural Citizens Exchange Center)

Included in the registration fee. **Please wear the name tag**

Gala Party

July 22, 18:30-20:30

On the Sakurajima ferryboats

(Start from and come back to the Kagoshima port, Sakurajima ferry terminal)

Included in the registration fee

There are two boats and the buses will directly go to either of the boats after the mid-conference field trip.

Participants who will not attend the field trip can join at Kagoshima port (Sakurajima ferry terminal) on 18:20. **Please wear the name tag**

Conference dinner

July 24, 19:00-21:00

Hotel Shiroyama Kagoshima (4th floor, Emerald Hall)

JPY 8,000 (Please buy the ticket before 1900 on 21st July)

Bus transport service from the parking lot at the Site A between 17:55 ~ 18:45.

Please wear the name tag and show the invitation at a reception of the dinner hall.

Dress: Casual

Related Workshops and Meetings

Workshops

W01 - 8th Workshop on Volcanic Lakes, Japan 2013	July 25-31	Aso, Kirishima, Noboribetsu and Usu	
W02 - Volcano Acoustics: from installation to analysis	July 25-26	Sakurajima Volcano	
W03 - Workshop on new methods/computer codes for volcano monitoring	July 19	9:00-17:00	Houzan Hall
W04 - Final team meeting of the PLUTONS project	July 19	9:00-17:00	Houzan Hall
W05 - V-Hub Workshop: Introduction to the VHub.org cyberinfrastructure and hands-on sessions on many of the on-line tools already available to its members	July 25	9:30-18:30	Tenmonkan Visionhall 8F
W06 - A benchmarking exercise to promote inter-comparison for numerical models of volcanic mass flows	July 26	9:30-16:30	Tenmonkan Visionhall 6F
W07 - RHEA: A collaborative database for rheological magmatic properties	July 25	9:00-17:00	Houzan Hall
W08 - Workshop on the Impacts of Volcanic Ashfalls and Gas Dispersions	July 19	13:00-17:00	Houzan Hall

Meetings

IAVCEI Executive Committee meeting	July 19	14:00-17:00	Room B3
IAVCEI Commission leader meeting	July 20	18:30-20:30	Room A2
IAVCEI Task group on protocols and best practices meetings	July 20	18:30-20:30	Room A3
Meeting for the IAVCEI commission on Volcano-ice interactions	July 21	12:45-13:30*	Room A2
Meeting of CEV committee	July 21	12:45-13:30*	Room A3
Meeting for the GVM project	July 21	12:45-13:30*	Room B1
Member meeting of the IASPEI-IAVCEI volcano seismology commission	July 21	12:00-13:30*	Room B3
IAVCEI Early Career working group	July 21	19:00-21:00	Room A2
Commission of Chemistry of Volcanic Gases meeting	July 21	19:00-21:00	Room A3
Creation of a global volcano deformation database	July 21	19:00-21:00	Room A4
Meeting of IAVCEI Commission on tephra hazard modelling	July 21	19:00-21:00	Room A5
Cities and Volcanoes Commission meeting	July 21	19:00-21:00	Room A6
WOVO-WOVodat meeting	July 21	19:00-22:00	Houzan Hall
Meeting of the Commission on Statistics in Volcanology	July 23	12:45-13:30*	Room A2
Board meeting for the Global Volcano Model Network	July 23	12:00-13:30*	Room B3
Commission of Crater Lake, IAVCEI	July 23	19:00-21:00	Room A2
EMSEV Working Group	July 23	19:00-21:00	Room A3
Remote Sensing Calibration and Validation Working Group	July 23	19:00-21:00	Room A4
Collapse caldera committee	July 23	19:00-21:00	Room A5
IAVCEI Commission on Monogenetic Volcanism	July 23	19:00-21:00	Room A6
Steering committee meeting for the Global Volcano Model Network	July 23	19:00-20:45**	Room B2
Meeting of the DPRI-CABOT	July 24	12:00-13:30*	Room B3

* End-time of the lunch meetings can be extend until 14:15 (45 min before the start of PM oral-sessions).

** End-time of the evening meetings at the site B should be shorter owing to closing-time of the building.

Social Events – Friends of Volcano Fair

The Committee Office of the Sakurajima Taisho Eruption 100th Anniversary Project

Friends of Volcano Fair will be held from 10:00 to 20:00 on 20th and 21st, July at Front Garden and on the 5th floor of Site A (Kagoshima Prefectural Citizens Exchange Center).

Under the theme of “Let’s learn about Sakurajima and volcanic disaster prevention in a fun way”, these events are open to the public with free of charge.

The taiko performance “**Sakurajima Island Drums of Fire** (Sakurajima Hinoshima Taiko)” and a “**Bingo game**” will be held at Front Garden. Winners of the Bingo game will receive emergency supplies for disaster. On the 5th floor, “**Kitchen Volcanology**”, “**Making letter pads with volcanic ash**” and other activities will be held.

These activities are planned to enhance our children’s interests in volcanoes.



Taiko performance “Sakurajima Island Drums of Fire”



Kitchen Volcanology (Collapse experiment of a cocoa volcano)

Site A, Front Garden (July 20-21, 10:00-16:00)

- The taiko performance “Sakurajima Island Drums of Fire (Sakurajima Hinoshima Taiko)”
- Bingo game

Site A, 5th floor (July 20-21, 10:00-16:00)

- Kitchen Volcanology
- Making letter pads with volcanic ash
- Free Green Tea Service
- Product Fair “The blessings from volcanoes”
- Presentation “The blessings from volcanoes”

Site A, 5th floor (July 20-21, 13:00-15:00, 16:00-20:00)

Experience Kagoshima’s Culture

- Dressing up in Japanese Armor
- Dressing up in Japanese Yukata
- Calligraphy

Free Green Tea Service (Site A, 5th floor)

Kagoshima is the second largest tea producer in Japan.

Please enjoy the special green tea cultivated at the foot of Mt. Kirishima.

Product Fair “The blessings from volcanoes” (Site A, 5th floor)

Various products related to volcanoes are on sale.

Please come and have a look at products unique to Kagoshima.

Presentation “The blessings from volcanoes” (Site A, 5th floor)

Products made from shirasu (volcanic ejecta) will be presented. The products range from cosmetics to slabs for greening base and residential roof tiles. Please have a look at these world-class products which Kagoshima is proud of.

Experience Kagoshima’s Culture (Site A, 5th floor, 13:00-15:00, 16:00-20:00)

Dressing up in Japanese Armor

Traditional armor was worn by Japanese samurais. A company in Kagoshima has more than 90% of the share of production of armors in Japan. Some of these armors are worn by movie and TV stars, and others are used as exhibit items at museums.

“Dressing up in Japanese armor” is a very rare opportunity even for Japanese. Why don’t you take advantage of this unique chance in Kagoshima?



Dressing up in Japanese Yukata

The yukata is commonly worn at occasions of summer events such as fireworks display or summer festivals. This is a type of Japanese kimono, a unique traditional culture of Japan.

The yukata is comfortable during hot and humid summer in Japan. You can experience the mood characteristic of Japan.

We have prepared a yukata both for men and women. Please come and try one on.



Calligraphy

Calligraphy is a traditional culture that is deeply rooted in Japanese lifestyle.

Please try to write “火山” (meaning a volcano) or “桜島” (meaning Sakurajima) with a writing brush. We will laminate it for you. We are sure that this will make a memorable souvenir.



Mid-conference Field Trip (on July 22)

Leaders:

Tetsuo Kobayashi (Kagoshima Univ.), Ryusuke Imura (Kagoshima Univ.) and Mitsuru Okuno (Fukuoka Univ.)

M1. Ibusuki course

The Ibusuki Volcanic Area occupies the western half of the Ata caldera (Matumoto, 1943) at the mouth of the Kagoshima Bay, which is considered as the volcano-tectonic graben. The trip will provide special views of Lake Ikeda, Kaimondake and other post-caldera volcanoes within the caldera. Lava and overlying tephra layers from these volcanoes can be observed in the roadside outcrop on Usuyama (the eastern foot of Kiyomidake volcano). At the Fushime coast, there are wonderful views of cliffs of Ikeda pyroclastic flows, the volcanic neck Takeyama, the sand steam bath "Suna-mushi" and the Yamakawa geothermal power plant. We will also visit the archaeological museum "COCCO Hashimure", which is exhibiting archaeological properties with special reference to the disaster of Kaimondake volcano. On the way to Ibusuki, we will have a panoramic view of the Sakurajima volcano and Kagoshima city from Senganbira along the Ibusuki Skyline (mountain road).

7:45 Parking of Site A (Kagoshima Prefectural Exchange Center)

Kaimondake volcano and Ikeda caldera (with lunch)

18:00 Kagoshima-ko Ferry Terminal

18:30 Gala party on the Sakurajima ferry boat

20:30 Kagoshima-ko Ferry Terminal*



Kaimondake volcano and Lake Ikeda

M2&M3. Aira course

The trip will provide a special view of the Aira caldera and surrounding areas including Kirishima and Sakurajima volcanoes, which are located within the Kakuto and Aira calderas, respectively. They are post-caldera composite volcanoes ejecting lava flows associated with many tephra layers during the Late Quaternary. In addition, we will visit the Kirishima Shrine located in the southern foot of Kirishima volcano. The current red-painted main building of shrine was constructed in 1715. Finally, we visit the “Uenohara Jomon no mori (Archaeological museum)”, which is the remains of a 9500 year-old settlement. This one-day trip, we will enable us to understand how the southern Kyushu inhabitants have lived through several volcanic eruptions.

(M2 and M3 courses stop at the same site. Only the visiting order is different.)

M2. Aira course

7:45 Southwest parking, Kagoshima Chuo station

Kirishima and Sakurajima volcanoes (with lunch)

18:00 Sakurajima-ko Ferry Terminal (Sakurajima Island)

18:30 Gala party on the Sakurajima Ferryboat

20:30 Kagoshima-ko Ferry Terminal*

M3. Aira course

7:45 Southwest parking, Kagoshima Chuo station

Sakurajima Ferryboat - Sakurajima and Kirishima volcanoes (with lunch)

18:00 Kagoshima-ko Ferry Terminal

18:30 Gala party on the Sakurajima Ferryboat

20:30 Kagoshima-ko Ferry Terminal*

* Kagoshima-ko Ferry Terminal: 10-minute walk to Site A&B



The Kirishima Shrine



A small explosion of the Sakurajima volcano

Scientific Program

Saturday, July 20

Day 1						
Site	AM1(9:00-11:15)	AM2(11:30-13:00)	Site/Room		PM1(14:30-16:15)	PM2(16:30-18:15)
Houzan Hall	Opening ceremony	Keynote lectures	Site A	A1	2K. Experimental volcanology (O1-O7)	2K. Experimental volcanology (O8-O14)
	Award ceremony and lecture			A2	1A. Volatiles, fluids, and melts in magmatic and metamorphic processes (O1-O7)	1A. Volatiles, fluids, and melts in magmatic and metamorphic processes (O8-O14)
	A3	4E. Testing eruption forecast and open issues (O1-O7)		4E. Testing eruption forecast and open issues (O8-O14)		
	A4					
	A5	3H. Lava flows (O1-O7)		3H. Lava flows (O8-O14)		
	A6	4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions (O1-O5)		4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions (O6-O9)		
		Site B		B1	3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma (O1-O6)	3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma (O7-O11)
				B2	2F. Stress, strain and mass changes at active volcanoes (O1-O6)	2F. Stress, strain and mass changes at active volcanoes (O7-12)

Instruction to Presenters

Oral presentation

- * Please prepare your presentation file on "Power Point(Windows)" or PDF and drop it at the Speaker Ready Room by the day before your presentation.
- * The Speaker Ready Room is at 4th floor of Site A and is open between 9:00 - 19:00 on 20th, 21st and 23rd, July and between 13:00-19:00 on 19th July.
- * The following version of Power Point is acceptable; 97, 2000, 2002, 2003, 2007, 2010, 2013.
- * Only a Windows PC is available for presentation and We do not accept to use your own PC for presentation.
- * Please verify your presentation on a Windows PC by yourself, if you prepared the file on Macintosh.
- * Movies will be played on Windows Media Player on Windows 7 without sound. The wmv format is recommended.

Poster presentation

- * Poster size is 914mm (horizontal length) by 1292mm (vertical length).
- * Location of each poster will be shown on a plan at the entrance of each poster session room.
- * Poster presentation time is 8:30 - 18:45 on 21st and 23rd July, and 8:30 - 16:45 on 24th, July.
- * Core time of poster presentation is between 13:30 - 15:00 on 21st, 23th and 24th.
- * Please remove your poster by 19:00 on 21st and 23rd July, and by 17:00 on 24th, July.

Scientific Program

Sunday, July 21

Day 2							
Site/Room		AM1(8:45-10:30)	AM2(10:45-12:30)	Site/Room		PM1(15:00-16:45)	PM2(17:00-18:45)
Site A	A1	2K. Experimental volcanology (O15-O21)	2H. Dynamics of volcanic processes (O1-O7)	Site A	A1	2H. Dynamics of volcanic processes (O8-O14)	2H. Dynamics of volcanic processes (O15-O21)
	A2	1A. Volatiles, fluids, and melts in magmatic and metamorphic processes (O15-O21)	1C. Generation, transportation, and emplacement of magma in continental crust (O1-O6)		A2	1C. Generation, transportation, and emplacement of magma in continental crust (O7-O13)	1C. Generation, transportation, and emplacement of magma in continental crust (O14-O19)
	A3	1E. The dynamics of geothermal systems (O1-O7)	1E. The dynamics of geothermal systems (O8-O14)		A3	1E. The dynamics of geothermal systems (O15-O21)	2B. Seismic triggering of volcanic ruptions and related activities (O1-O7)
	A4	3G. Observation, theory and experiments on volcanogenic particulate mass flowas and their deposits (O1-O6)	3G. Observation, theory and experiments on volcanogenic particulate mass flowas and their deposits (O7-O12)		A4	3G. Observation, theory and experiments on volcanogenic particulate mass flowas and their deposits (O13-O19)	3G. Observation, theory and experiments on volcanogenic particulate mass flowas and their deposits (O20-O24)
	A5	3B. Monogenetic volcanism (O1-O7)	3B. Monogenetic volcanism (O8-O14)		A5	3B. Monogenetic volcanism (O15-O21)	3B. Monogenetic volcanism (O22-O28)
	A6	4A. Forecasting the weather and climate effects of volcanic eruptions (O1-O7)	4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning (O1-O7)		A6	4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning (O8-O14)	4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning (O15-O18)
Site B	B1	2D. Imaging and monitoring of volcanic activity (O1-O6)	2D. Imaging and monitoring of volcanic activity (O7-O13)	Site B	B1	2D. Imaging and monitoring of volcanic activity (O14-O20)	2D. Imaging and monitoring of volcanic activity (O21-O27)
	B2	2F. Stress, strain and mass changes at active volcanoes (O13-O19)	2F. Stress, strain and mass changes at active volcanoes (O20-O26)		B2	3J. Carbon dioxide emission from volcanoes and tectonically active regions (O1-O7)	3J. Carbon dioxide emission from volcanoes and tectonically active regions (O8-O14)
Poster sessions (Core time: 13:30-15:00)							
Site A		1A. Volatiles, fluids, and melts in magmatic and metamorphic processes					
		1C. Generation, transportation, and emplacement of magma in continental crust					
		1E. The dynamics of geothermal systems					
		2B. Seismic triggering of volcanic eruptions and related activities					
		2F. Stress, strain, and mass changes at active volcanoes					
		2H. Dynamics of volcanic processes					
		2K. Experimental volcanology					
		3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma chambers					
		3H. Lava flows					
		3J. Carbon dioxide emission from volcanoes and tectonically active regions					
		4A. Forecasting the weather and climate effects of volcanic eruptions					
		4E. Testing eruption forecast and open issues					
	4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning						

Scientific Program

Tuesday, July 23

Day 4						
Site/Room		AM1(8:45-10:30)	AM2(10:45-12:30)	Site/Room	PM1(15:00-16:45)	PM2(17:00-18:45)
Site A	A1	2A. Volcanic tremor, seismic events and volcanic conduit dynamics (O1-O7)	2A. Volcanic tremor, seismic events and volcanic conduit dynamics (O8-O14)	Site A	A1	2A. Volcanic tremor, seismic events and volcanic conduit dynamics (O15-O21) 2A. Volcanic tremor, seismic events and volcanic conduit dynamics (O22-O28)
	A2	3A. Ocean island volcanoes and large igneous province (O1-O7)	3A. Ocean island volcanoes and large igneous province (O8-O14)		A2	3A. Ocean island volcanoes and large igneous province (O15-O21) 3A. Ocean island volcanoes and large igneous province (O22-O27)
	A3	3F. The complexity and diversity of pyroclastic fall out deposits (O1-O6)	3F. The complexity and diversity of pyroclastic fall out deposits (O7-O12)		A3	3F. The complexity and diversity of pyroclastic fall out deposits (O13-O19) 2E. Remote sensing and terrain modelling (O1-O7)
	A4	3K. Volcano-ice interaction and planetary volcanism (O1-O7)	3K. Volcano-ice interaction and planetary volcanism (O8-O14)		A4	4G. Recent eruption impacts and mitigation (O1-7) 4G. Recent eruption impacts and mitigation (O8-O14)
	A5	3C. Caldera (O1-O7)	3C. Caldera (O8-O14)		A5	3C. Caldera (O15-O21) 3C. Caldera (O22-O28)
	A6	2J. Understanding sudden effusive-explosive transitions (O1-O7)	4C. Forecasting volcanic hazards I (O1-O7)		A6	4C. Forecasting volcanic hazards I (O8-O14) 4C. Forecasting volcanic hazards I (O15-O21)
Site B	B1	1B. Magma processes in crust (O1-O6)	1B. Magma processes in crust (O7-O12)	Site B	B1	1B. Magma processes in crust (O13-O18) 1B. Magma processes in crust (O19-O24)
	B2	2G. Volatile tracking of magma degassing processes and volcanic eruptions (O1-O6)	2G. Volatile tracking of magma degassing processes and volcanic eruptions (O7-O13)		B2	2G. Volatile tracking of magma degassing processes and volcanic eruptions (O14-O19) 2G. Volatile tracking of magma degassing processes and volcanic eruptions (O20-O26)
Poster sessions (Core time: 13:30-15:00)						
Site A		2A. Volcanic tremor, seismic events and volcanic conduit dynamics				
		2D. Imaging and monitoring of volcanic activity				
		2G. Volatile tracking of magma degassing processes and volcanic eruptions				
		3A. Ocean island volcanoes and large igneous province				
		3B. Monogenetic volcanism				
		3C. Caldera				
		3F. The complexity and diversity of pyroclastic fall out deposits				
		3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits				
		4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions				
		4C. Forecasting volcanic hazards I				
	4G. Recent eruption impacts and mitigation					

Scientific Program

Wednesday, July 24

Day 5						
Site/Room		AM1(8:45-10:30)	AM2(10:45-12:30)	Site/Room		PM1(15:00-16:45)
Site A	A1	3E. Volcanic plume dynamics (O1-O7)	3E. Volcanic plume dynamics (O8-O14)	Site A	A1	3E. Volcanic plume dynamics (O15-O21)
	A2	2C. High-level volcano monitoring and data interpretation (O1-O7)	2C. High-level volcano monitoring and data interpretation (O8-O14)		A2	2C. High-level volcano monitoring and data interpretation (O15-O21)
	A3	2E. Remote sensing and terrain modelling (O8-O14)	2E. Remote sensing and terrain modelling (O15-O21)		A3	2E. Remote sensing and terrain modelling (O22-O28)
	A4	3I. Active crater lakes (O1-O7)	3I. Active crater lakes (O8-O14)		A4	
	A5	2I. Open system volcanoes (O1-O6)	2I. Open system volcanoes (O7-O13)		A5	2I. Open system volcanoes (O14-O20)
	A6	4D. Forecasting volcanic hazards II (O1-O7)	4D. Forecasting volcanic hazards II (O8-O14)		A6	4D. Forecasting volcanic hazards II (O15-O21)
Site B	B1	1D. Insights into magma chamber processes and volcanic forecasting (O1-O7)	1D. Insights into magma chamber processes and volcanic forecasting (O8-O14)	Site B	B1	1D. Insights into magma chamber processes and volcanic forecasting (O15-O21)
	B2	4H. Databases in volcanology (O1-O7)	4H. Databases in volcanology (O8-O14)		B2	4H. Databases in volcanology (O15-O21)
Poster sessions (Core time: 13:30-15:00)						
Site A		1B. Magma processes in crust				
		1D. Insights into magma chamber processes and volcanic forecasting				
		2C. High-level volcano monitoring and data interpretation				
		2E. Remote sensing and terrain modelling				
		2I. Open system volcanoes				
		2J. Understanding sudden effusive-explosive transitions				
		2L. Structure and properties of magmatic liquids				
		3E. Volcanic plume dynamics				
		3I. Active crater lakes				
		3K. Volcano-ice interaction and planetary volcanism				
		4D. Forecasting volcanic hazards II				
		4H. Databases in volcanology				
		4I. Education and Geoparks				

PROGRAM**July 20, AM**

Date/Time	No.	Title	Authors	Presenter
Keynote lectures Oral Presentation July 20 AM2 (11:30-13:00) Houzan Hall Chair: Setsuya Nakada				
July 20 11:30-12:15	0A2_Key-01	Andesites: their origin and the role in the Earth evolution	Yoshiyuki Tatsumi	Yoshiyuki Tatsumi
July 20 12:15-13:00	0A2_Key-02	Forecasting volcanic activity of Sakurajima	Masato Iguchi	Masato Iguchi

PROGRAM**July 20, PM**

Date/Time	No.	Title	Authors	Presenter
2K. Experimental volcanology Oral Presentation July 20 PM1 (14:30-16:15) Room A1 Chair: Satoshi Okumura, Atuko Namiki, Josef Dufek				
July 20 14:30-14:45	0P1_2K-O1	Supervolcano eruptions driven by melt buoyancy in large silicic magma chambers	Wim J Malfait, Rita Seifert, Sylvain Petitgirard, Other	Wim J Malfait
July 20 14:45-15:00	0P1_2K-O2	A laboratory model for melting erosion of a magma chamber roof and the generation of a rhythmic layering	Yasuko Shibano, Ikuro Sumita, Atsuko Namiki	Ikuro Sumita
July 20 15:00-15:15	0P1_2K-O3 Invited	Volatile/melt equilibrium in subvolcanic reservoirs: the partitioning of sulfur and chlorine	Zoltan Zajacz	Zoltan Zajacz
July 20 15:15-15:30	0P1_2K-O4	Laboratory geyser; Insights into predictability of mass and style of eruptions	Atsushi Toramaru, Kazuki Maeda	Atsushi Toramaru
July 20 15:30-15:45	0P1_2K-O5	Cyclicality in slug driven basaltic eruptions: insights from large-scale analogue experiments	Edward W Llewellyn, Elisabetta Del Bello, Stephen J Lane, Other	Edward W Llewellyn
July 20 15:45-16:00	0P1_2K-O6	Periodic lava fountaining on basaltic volcanoes: dynamic behavior and experimental model	Alexey Yu. Ozerov	Alexey Yu. Ozerov
July 20 16:00-16:15	0P1_2K-O7	The slug buster: an analogue experiment for the study of Strombolian explosions	Jacopo Taddeucci, Antonio Capponi, Piergiorgio Scarlato, Other	Jacopo Taddeucci
2K. Experimental volcanology Oral Presentation July 20 PM2 (16:30-18:15) Room A1 Chair: Atuko Namiki, Josef Dufek, Satoshi Okumura				
July 20 16:30-16:45	0P2_2K-O8	See-through experiments of volcanic eruption for outreach program	Akira Takada, Ryuta Furukawa, Teruki Oikawa, Other	Akira Takada
July 20 16:45-17:00	0P2_2K-O9	Mechanism of delayed fragmentation of vesicular magma by decompression	Tsukasa Shida, Mitsunori Tsugo, Masaharu Kameda, Other	Tsukasa Shida
July 20 17:00-17:15	0P2_2K-O10	The lifetime of bubbles	Chinh T Nguyen, Helge M Gonnermann, Yangyang Chen, Other	Chinh T Nguyen
July 20 17:15-17:30	0P2_2K-O11	Experimental constraints on the effects of shear and displacement on vesicle coalescence	Robert Dennen, Benjamin Andrews, Michael Manga, Other	Robert Dennen
July 20 17:30-17:45	0P2_2K-O12	Experimental study on textural relaxation of deformed melt foam	Shizuka Otsuki, Michihiko Nakamura	Shizuka Otsuki
July 20 17:45-18:00	0P2_2K-O13	Bubble morphologies, gas escape and fragmentation of crystal-rich magma	Alison C Rust, Katharine V Cashman, Julie Oppenheimer, Other	Alison C Rust
July 20 18:00-18:15	0P2_2K-O14	Dissolved H ₂ O distribution in vesicular magmatic glass records bubble resorption	Iona M. McIntosh, Edward W. Llewellyn, Madeleine C.S. Humphreys, Other	Iona M. McIntosh
1A. Volatiles, fluids, and melts in magmatic and metamorphic processes Oral Presentation July 20 PM1 (14:30-16:15) Room A2 Chair: Georg Zellmer, Junichi Nakajima, Hikaru Iwamori				
July 20 14:30-14:45	0P1_1A-O1	Electromagnetic detection of partial melts and volatiles across the Middle America Trench offshore Nicaragua	Samer Naif, Kerry Key, Steven Constable, Other	Samer Naif
July 20 14:45-15:00	0P1_1A-O2	Mantle tomography and dynamics of the Western-Pacific subduction zones	Dapeng Zhao	Dapeng Zhao
July 20 15:00-15:15	0P1_1A-O3 Invited	The pattern of fluid release from the subducting slab and the migration of fluids in the mantle wedge	Ikuko Wada, Mark D Behn, Alison M Shaw	Ikuko Wada
July 20 15:15-15:30	0P1_1A-O4	Behavior of subducted water and its role on the arc magma genesis in the NE Japan arc: A combined geophysical and geochemical approach	Jun-Ichi Kimura, Junichi Nakajima	Jun-Ichi Kimura
July 20 15:30-15:45	0P1_1A-O5	Sr-Nd-Pb isotope compositions of frontal arc stratovolcanoes in Northeast Japan arc	Masao Ban, Toshiro Takahashi, Yuka Hirahara, Other	Masao Ban
July 20 15:45-16:00	0P1_1A-O6	Variable time lags between fluid addition and mantle melting in subduction zones	Reubi Olivier, Sims W.W Kenneth, Bourdon Bernard	Reubi Olivier
July 20 16:00-16:15	0P1_1A-O7	Effects of water on the oxidation state of iron in hydrous rhyolites	Donald G. Fraser, Madeleine C.S. Humphreys	Donald G. Fraser

1A. Volatiles, fluids, and melts in magmatic and metamorphic processes				
Oral Presentation July 20 PM2 (16:30-18:15) Room A2				
Chair: Alexander Nichols, Morihisa Hamada, Dapeng Zhao				
July 20 16:30-16:45	OP2_1A-O8	Thermodynamic and molecular approaches to physical-chemical evolution of high-temperature volatiles	Alexander Iv. Malyshev	Alexander Iv. Malyshev
July 20 16:45-17:00	OP2_1A-O9	Metasomatism within the mantle wedge inferred from NaCl equivalent content of aqueous fluid inclusions in sub-arc mantle peridotites from the Kamchatka arc	Satoko Ishimaru, Tatsuhiko Kawamoto, Yoshitaka Kumagai, Other	Satoko Ishimaru
July 20 17:00-17:15	OP2_1A-O10 Invited	The mantle water valve: A melting feedback on arc magma water concentrations	Terry A Plank, Katherine A Kelley, Mindy M Zimmer, Other	Terry A Plank
July 20 17:15-17:30	OP2_1A-O11	Influence of pre-eruptive volatile contents on eruptive style at scoria cones: the case of Pelagatos volcano, Sierra Chichinautzin, central Mexico	Julie Roberge, Marie-Noelle Guilbaud, Paola Reyes-Luna	Julie Roberge
July 20 17:30-17:45	OP2_1A-O12	Noble gas and halogen recycling at the Izu-Ogasawara subduction zone	Hirochika Sumino, Deborah Chavrit, Lisa Jepsen, Other	Hirochika Sumino
July 20 17:45-18:00	OP2_1A-O13	Fluorine and chlorine as tracers of magma-fluid and magma-crust interactions	Marion Le Voyer, Estelle F Rose-Koga, Elizabeth Cottrell, Other	Marion Le Voyer
July 20 18:00-18:15	OP2_1A-O14	Tracing He, N, Ar and C isotopes in the hydrothermal system of Tatun Volcanic Group, Taiwan	Emilie Roulleau, Yuji Sano, Naoto Takahata, Other	Emilie Roulleau
4E. Testing eruption forecast and open issues				
Oral Presentation July 20 PM1 (14:30-16:15) Room A3				
Chair: Mark Bebbington, Gill Jolly, Laura Sandri				
July 20 14:30-14:45	OP1_4E-O1 Invited	Short-term eruption forecasting with BET_EF: applications and results	Laura Sandri, Warner Marzocchi, Jacopo Selva, Other	Laura Sandri
July 20 14:45-15:00	OP1_4E-O2	Testing the efficacy of volcano alert levels	Annie E.G. Winson, Fidel Costa Rodriguez, Gordon Woo, Other	Annie E.G. Winson
July 20 15:00-15:15	OP1_4E-O3	An assessment of volcanic unrest in the 21st century: pre-eruptive processes and timescales of reactivation	Georgia Phillipson, Joachim Gottsmann	Georgia Phillipson
July 20 15:15-15:30	OP1_4E-O4	Assessing probabilistic forecasts of volcanic eruption onsets	Mark S Bebbington	Mark S Bebbington
July 20 15:30-15:45	OP1_4E-O5	RETROACTIVE APPLICATION OF FORECAST FAILURE METHOD FOR PREDICTING MERAPI ERUPTION 2010 USING DEFORMATION AND SEISMIC DATA	Subandriyo, Nurnaning Aisyah, Agus Budi Santoso, Other	Subandriyo
July 20 15:45-16:00	OP1_4E-O6	Eruption forerunners from multi-parameter monitoring and the corresponding predictability skills (Piton de la Fournaise)	Agathe Schmid, Jean Robert Grasso	Jean Robert Grasso
July 20 16:00-16:15	OP1_4E-O7 Invited	Real-time forecasting of catastrophic rock failure and implications for predictability of volcanic eruptions	Ian G Main, Andrew F Bell, Rosa Filguera, Other	Ian G Main
4E. Testing eruption forecast and open issues				
Oral Presentation July 20 PM2 (16:30-18:15) Room A3				
Chair: Micol Todesco, Andrew Bell, Chris Kilburn				
July 20 16:30-16:45	OP2_4E-O8	Identifying the form of precursory trends before eruptions: reducing uncertainty with rock-physics experiments	Richard Wall, Christopher Kilburn, Philip Meredith	Richard Wall
July 20 16:45-17:00	OP2_4E-O9 Invited	Long swarms and short swarms	Stephen R McNutt	Stephen R McNutt
July 20 17:00-17:15	OP2_4E-O10	Predicting the unpredictable: using families of low frequency seismicity to forecast volcanic unrest	Rebecca O. Salvage, Jurgen W. Neuberg	Rebecca O. Salvage
July 20 17:15-17:30	OP2_4E-O11	On the self-similarity of rifting episodes	Luigi Passarelli, Eleonora Rivalta	Luigi Passarelli
July 20 17:30-17:45	OP2_4E-O12	Simplifying assumptions in volcano modeling: are we missing something crucial?	Chiara P Montagna, Antonella Longo, Paolo Papale, Other	Chiara P Montagna
July 20 17:45-18:00	OP2_4E-O13	On the unrest and eruptive behaviour of large calderas, with examples from Campi Flegrei	Paolo Papale, Giovanni Chiodini, Micol Todesco	Paolo Papale
July 20 18:00-18:15	OP2_4E-O14 Invited	Rumbles and mumbles: what we know we know - and don't know - about recent volcanic activity in New Zealand	Nicolas Fournier	Nicolas Fournier
3H. Lava flows				
Oral Presentation July 20 PM1 (14:30-16:15) Room A5				
Chair: Stephen Self, Susumu Umino, Meagen Pollock				
July 20 14:30-14:45	OP1_3H-O1	Multiscale parametric imaging of basaltic lava flows	Michael S. Ramsey, Rachel J. Lee, Steven W. Anderson, Other	Michael S. Ramsey
July 20 14:45-15:00	OP1_3H-O2 Invited	Investigating Lava Properties using Experiments, Video Analysis, Infrared Thermometry and Numerical Flow Models	Einat Lev, Jeff Karson, Robert Wysocki	Einat Lev
July 20 15:00-15:15	OP1_3H-O3	Topographic and stochastic influences on pāhoehoe lava lobe emplacement	Christopher W Hamilton, Lori S Glaze, Mike R James, Other	Christopher W Hamilton
July 20 15:15-15:30	OP1_3H-O4	Investigating the formation and evolution of channel networks in Hawaiian lava flows with airborne LiDAR analysis	Hannah R Dietterich, Katharine V Cashman, S. Adam Soule, Other	Hannah R Dietterich
July 20 15:30-15:45	OP1_3H-O5 Invited	Detection of subtle lava flow morphology in densely forested areas by airborne LiDAR survey and Red Relief Image Map	Tatsuro Chiba, Kenichi Arai, Hisashi Sasaki, Other	Tatsuro Chiba

July 20 15:45-16:00	0P1_3H-O6	Longitudinal variation of the morphology of the Geomunoreum lava cave system in Jeju Island, Republic of Korea	Ung San Ahn, Yong Mun Jeon, Young Kwan Sohn	Ung San Ahn
July 20 16:00-16:15	0P1_3H-O7	Using pillowed flows to locate effusive centers and explore for volcanogenic massive sulfide deposits: an example from the Archean Abitibi Greenstone Belt of Canada	Pierre-Simon Ross, Russell Rogers, Jean Goutier, Other	Pierre-Simon Ross

3H. Lava flows**Oral Presentation July 20 PM2 (16:30-18:15) Room A5****Chair: Christopher Hamilton, Ben Edwards, Alex Nichols**

July 20 16:30-16:45	0P2_3H-O8	Emplacement of continental flood basalt lava flow fields	Stephen Self, Charlotte Vye-Brown, Richard J Brown	Stephen Self
July 20 16:45-17:00	0P2_3H-O9	Lava architecture and vent distribution in an active rift (Manda-Hararo, Afar, Ethiopia)	Charlotte Vye-Brown, Sarah Medynski, Dan Barford, Other	Charlotte Vye-Brown
July 20 17:00-17:15	0P2_3H-O10	Dynamics of rhyolitic obsidian flow evolution at Cordón Caulle, Chile	Hugh Tuffen, Mike R. James, Jonathan M. Castro, Other	Hugh Tuffen
July 20 17:15-17:30	0P2_3H-O11	Dynamical regime and advance rate of lava flows using its deposit characteristics: 2 cases from the Lonquimay and Villarrica volcanoes, Southern Andes of Chile	Maria Angelica Contreras, Angelo Castruccio	Angelo Castruccio
July 20 17:30-17:45	0P2_3H-O12 Invited	Generation of pillow basalts in Iceland, submarine to subglacial.	Armann Hoskuldsson	Armann Hoskuldsson
July 20 17:45-18:00	0P2_3H-O13	Dynamics of pillow-dominated subglacial eruptions recorded in Undirhlíðar quarry, Reykjanes Peninsula, southwest Iceland	Meagen Pollock, Benjamin R Edwards, Lindsey Bowman, Other	Meagen Pollock
July 20 18:00-18:15	0P2_3H-O14	Morphometry and morphology of lunar mare domes from SELENE terrain camera	Motomaro Shirao, Junichi Haruyama, Ryunosuke Imaeda	Motomaro Shirao

4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions**Oral Presentation July 20 PM1 (14:30-16:15) Room A6****Chair: Pierre Delmelle, Peter Baxter, Fred Prata**

July 20 14:30-14:45	0P1_4B-O1	Examining the ecological impacts of persistent volcanic degassing at Masaya, Nicaragua, using multi-temporal MODIS NDVI and ground-based data	Saskia M van Manen, Bethan Burson, Melanie Hinrichs, Other	Bethan Burson
July 20 14:45-15:00	0P1_4B-O2	Environmental implications of persistent degassing: Evidence from Masaya volcano, Nicaragua	Melanie Hinrichs, Hazel Rymer, Steve Blake, Other	Melanie Hinrichs
July 20 15:00-15:30	0P1_4B-O3 Invited	High-resolution size distributions and emission fluxes of trace elements from Masaya volcano, Nicaragua	Robert Martin, Georgina Sawyer, Jason Day, Other	Robert Martin
July 20 15:30-15:45	0P1_4B-O4	Mechanism of high concentration events of sulfur dioxide at the surface around Sakurajima Volcano	Kisei Kinoshita, Masaya Sakamoto, Chikara Kanagaki, Other	Kisei Kinoshita
July 20 15:45-16:00	0P1_4B-O5	The enigma of reactive nitrogen in volcanic emissions	Robert S Martin, Evgenia Ilyinskaya, Clive Oppenheimer	Robert S Martin

4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions**Oral Presentation July 20 PM2 (16:30-18:15) Room A6****Chair: Clive Oppenheimer, Pierre Delmelle, Peter Baxter**

July 20 16:30-16:45	0P2_4B-O6	New insights into the scavenging of fluoride by ash in volcanic eruption plumes	Pierre Delmelle, Paul M Ayris, Elena C Maters, Other	Pierre Delmelle
July 20 16:45-17:15	0P2_4B-O7 Invited	New insights into volatile adsorption by tephra in volcanic eruptions	Paul M Ayris, Pierre Delmelle, Elena Maters, Other	Paul M Ayris
July 20 17:15-17:30	0P2_4B-O8	Geochemical and geocological aspects of volcanic eruptive activity (Klyuchevskaya group of volcanoes, Kamchatka)	Nataliya A Malik, Yaroslav D Muravyev	Nataliya A Malik
July 20 17:30-17:45	0P2_4B-O9	Acidic processing enhances iron solubility in volcanic ash: a mechanism for increased iron input and organic carbon production upon ash deposition to the surface ocean.	Elena Maters, Pierre Delmelle, Paul Ayris, Other	Elena Maters

3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma chambers**Oral Presentation July 20 PM1 (14:30-16:15) Room B1****Chair: V. Acocella, A. Gudmundsson, Y. Aoki**

July 20 14:30-14:45	0P1_3D-O1	Eruption model of bromo volcano, east java, indonesia, in the 2011 eruption	Akhmad Zaennudin	Akhmad Zaennudin
July 20 14:45-15:00	0P1_3D-O2	Drilling of a volcanic conduit beneath the Hiyoriyama Cryptodome, Kuttara Volcano, Hokkaido, Japan	Yoshihiko Goto, Setsuya Nakada, Hiroaki Sato, Other	Sumio Sakuma
July 20 15:00-15:15	0P1_3D-O3	The fissure eruptions of Fuji Volcano, Japan, during the last 10,000 years	Akira Takada, Takahiro Yamamoto, Yoshihiro Ishizuka, Other	Akira Takada
July 20 15:15-15:30	0P1_3D-O4	Numerical simulations of magma intrusion into crust near the surface by means of discrete element method	Shigekazu Kusumoto	Shigekazu Kusumoto
July 20 15:30-16:00	0P1_3D-O5 Invited	Stress and strain distribution in the shallow crust during dyke and sill emplacement	Janine L Kavanagh, David A Boutelier, Alexander R Cruden	Janine L Kavanagh
July 20 16:00-16:15	0P1_3D-O6	Energy sources, behaviour, and durations of volcanic eruptions	Agust Gudmundsson, Nahid Mohajeri	Agust Gudmundsson

3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma chambers				
Oral Presentation July 20 PM2 (16:30-18:15) Room B1				
Chair: J. White, G. Valentine, N. Geshi				
July 20 16:30-16:45	0P2_3D-O7	Structural variation of the feeder dikes of explosive eruptions in Miyakejima, Japan	Nobuo Geshi, Teruki Oikawa	Nobuo Geshi
July 20 16:45-17:15	0P2_3D-O8 Invited	Physical characteristics of kimberlite and basaltic intraplate volcanism, and implications of a biased kimberlite record	Richard J Brown, Greg A Valentine	Richard J Brown
July 20 17:15-17:30	0P2_3D-O9	Fragments within fragments: are composite bombs hints of weakness or sustained violence?	James D L White	James D L White
July 20 17:30-17:45	0P2_3D-O10	Linking maar eruptions with diatremes: experimental insights from single and multiple buried explosions	Pierre-Simon Ross, James D.L. White, Greg A. Valentine, Other	Pierre-Simon Ross
July 20 17:45-18:15	0P2_3D-O11 Invited	Volcanic jets, plumes and collapsing fountains: evidence from large-scale experiments, with particular emphasis on the entrainment rate.	Pierfrancesco Dellino, Fabio Dioguardi, Daniela Mele, Other	Pierfrancesco Dellino
2F. Stress, strain, and mass changes at active volcanoes				
Oral Presentation July 20 PM1 (14:30-16:15) Room B2				
Chair: Martha K Savage, Nicolas Fournier, Joachim Gottsmann				
July 20 14:30-15:00	0P1_2F-O1 Invited	Recent results of noise-based seismic velocity monitoring at Piton de la Fournaise Volcano, La Reunion	Florent Brenguier, Diane Rivet, Anne Obermann, Other	Florent Brenguier
July 20 15:00-15:15	0P1_2F-O2	The 2012 Kilauea volcano, Hawai'i, slow-slip event captured by cGPS and satellite radar interferometry	Pablo J. Gonzalez, Sergey V. Samsonov, Mimmo Palano	Pablo J. Gonzalez
July 20 15:15-15:30	0P1_2F-O3	Volcano-tectonic earthquakes correlated to stress rate in Izu-Oshima volcano	Yuichi Morita	Yuichi Morita
July 20 15:30-15:45	0P1_2F-O4	Time-dependent stressing and failure of an andesitic magma reservoir	Joachim Gottsmann, Henry Odber	Joachim Gottsmann
July 20 15:45-16:00	0P1_2F-O5	Geophysical signatures of magma chamber replenishment	Antonella Longo, Chiara P Montagna, Gilberto Saccorotti, Other	Paolo Papale
July 20 16:00-16:15	0P1_2F-O6	Geodetic data shed light on ongoing caldera subsidence at Askja, Iceland	Hazel Rymer, Elske de Zeeuw-van Dalfsen	Hazel Rymer
2F. Stress, strain, and mass changes at active volcanoes				
Oral Presentation July 20 PM2 (16:30-18:15) Room B2				
Chair: Yosuke Aoki, Martha K Savage, Nicolas Fournier				
July 20 16:30-17:00	0P2_2F-O7 Invited	Detection and interpretation of stress changes at restless volcanoes through analysis of VT earthquake fault-plane solutions	Diana C. Roman	Diana C. Roman
July 20 17:00-17:15	0P2_2F-O8	Structural controls on magma pathways beneath Asama volcano, Japan	Yosuke Aoki, Minoru Takeo, Takao Ohminato, Other	Yosuke Aoki
July 20 17:15-17:30	0P2_2F-O9	Moment- and Stress-Tensor-Inversion of volcanic earthquakes to constrain driving forces of the 2010 eruptions at Eyjafjallajökull (Iceland)	Martin Hensch, Bryndis Brandsdottir, Simone Cesca, Other	Martin Hensch
July 20 17:30-17:45	0P2_2F-O10	Insights from a model of pressurization and eruption in a system with two linked magma chambers	Stephen Blake	Stephen Blake
July 20 17:45-18:00	0P2_2F-O11	A two-magma-chamber model as a source of ground deformation at Grimsvotn volcano, Iceland	Thomas Reverso, Jean Vandemeulebrouck, Francois Jouanne, Other	Jean Vandemeulebrouck
July 20 18:00-18:15	0P2_2F-O12	Seismic Imaging of the Uppermost Magmatic System and Strombolian Eruptive Variability Associated with Conduit Changes at Erebus Volcano, Antarctica	Richard C Aster	Richard C Aster

PROGRAM

July 21, AM

Date/Time	No.	Title	Authors	Presenter
2K. Experimental volcanology				
Oral Presentation July 21 AM1 (8:45-10:30) Room A1				
Chair: Josef Dufek, Satoshi Okumura, Atuko Namiki				
July 21 8:45-9:00	1A1_2K-O15 Invited	Effects of gas escape and crystallization on the complexity of conduit flow dynamics during lava dome eruptions	Tomofumi Kozono, Takehiro Koyaguchi	Tomofumi Kozono
July 21 9:00-9:15	1A1_2K-O16	Outgassing dynamics along dikes and fractures	Laura Pioli, Barry Azzopardi, Costanza Bonadonna, Other	Laura Pioli
July 21 9:15-9:30	1A1_2K-O17	Thermomechanical milling of lithics in volcanic conduits	Michelle E. Campbell, Kelly Russell, Lucy Porritt	Michelle E. Campbell
July 21 9:30-9:45	1A1_2K-O18	Radio wave emission phenomenon due to rock fracture and its application to volcano research and hazard mitigation	T. Takano, J. Kato, Y. Suzuki, Other	T. Takano
July 21 9:45-10:00	1A1_2K-O19	Simulating discrete volcanic explosions: bench-scale and field-scale detonation experiments	Robin G Andrews	Robin G Andrews
July 21 10:00-10:15	1A1_2K-O20	Heat transfer during large-scale lava-ice/snow experiments	Benjamin R Edwards, Jeffrey Karson, Robert Wysocki, Other	Benjamin R Edwards
July 21 10:15-10:30	1A1_2K-O21	Experimental Generation of Volcanic Lightning	Corrado Cimarelli, Miguel A. Alatorre-Ibarguengoitia, Ulrich Kueppers, Other	Corrado Cimarelli

2H. Dynamics of volcanic processes**Oral Presentation July 21 AM2 (10:45-12:30) Room A1****Chair: Caroline Bouvet de la Maisonneuve, Luca Caricchi, Ed Llewellyn**

July 21 10:45-11:00	1A2_2H-O1	Applying exhaustive crustal xenolith petrology to test fluid dynamic simulations in the magma conduit	Antonio M. Alvarez-Valero, Francisco Pla, Leo M. Kriegsman, Other	Antonio M. Alvarez-Valero
July 21 11:00-11:15	1A2_2H-O2	Magma chambre paradox: decompression upon replenishment	Paolo Papale, Antonella Longo, Chiara P. Montagna	Paolo Papale
July 21 11:15-11:30	1A2_2H-O3	Petrographic assessment on possible drainback processes of the andesitic lava filled in the crater of Shinmoedake, 2011 eruption of Kirishima volcano	Hiroaki Sato, Keiko Suzuki, Eiichi Sato, Other	Hiroaki Sato
July 21 11:30-11:45	1A2_2H-O4	Textural analysis of obsidian lava flow in Shirataki, Northern Hokkaido, Japan	Kyohei Sano, Atsushi Toramaru, Keiji Wada	Kyohei Sano
July 21 11:45-12:00	1A2_2H-O5	Magmatic connections: The interplay of magmatic systems with their crustal containers	Josef D Dufek, Mark Ghiorso	Josef D Dufek
July 21 12:00-12:15	1A2_2H-O6	Positive correlation between crystal size and chemical composition of core; numerical simulation of the crystallization of plagioclase	Tsuyoshi Kichise, Atsushi Toramaru	Tsuyoshi Kichise
July 21 12:15-12:30	1A2_2H-O7 Invited	Linking petrology and volcano monitoring data at active arc volcanoes	Kate Saunders, Geoff Kilgour, Jon Blundy, Other	Kate Saunders

1A. Volatiles, fluids, and melts in magmatic and metamorphic processes**Oral Presentation July 21 AM1 (8:45-10:30) Room A2****Chair: Ken Koga, Marion Le Voyer, Tatsuhiko Kawamoto**

July 21 8:45-9:00	1A1_1A-O15	Estimation of sulfur and halogen fluxes at mid-ocean ridges deconvolving contributions from vesicle and solid components of MORB glasses	Takanori Kagoshima, Yuji Sano, Naoto Takahata, Other	Takanori Kagoshima
July 21 9:00-9:15	1A1_1A-O16	Halogens in normal- and enriched-basalts from Central Indian Ridge (18-20° S): testing the E-MORB subduction origin hypothesis	Lorraine Ruzié, Ray Burgess, David Hilton, Other	Lorraine Ruzié
July 21 9:15-9:30	1A1_1A-O17	Do fluorine and chlorine follow water and carbon dioxide fluid in magma?	Kenneth T Koga, Estelle Rose-Koga, Marion Le Voyer, Other	Kenneth T Koga
July 21 9:30-9:45	1A1_1A-O18 Invited	The effect of water on fluorine and chlorine solubility and solution mechanisms in aluminosilicate melts at high pressure and high temperature	Celia Dalou, Bjorn O. Mysen	Celia Dalou
July 21 9:45-10:00	1A1_1A-O19	Fluorine and the emplacement of extensive felsic lavas (flood rhyolites)	Andrea Agangi, Jocelyn McPhie, Vadim S Kamenetsky, Other	Andrea Agangi
July 21 10:00-10:15	1A1_1A-O20	Atmospheric CFCs and geogenic HCFCs in gas discharges from Mt. Etna and Vulcano Island (Italy)	Franco Tassi, Jacopo Cabassi, Francesco Capecchiacci, Other	Dmitri Rouwet
July 21 10:15-10:30	1A1_1A-O21	Reactive Halogen Chemistry in Volcanic Plumes	Nicole Bobrowski, Peter Luebcke, Julian Wittmer, Other	Nicole Bobrowski

1C. Generation, transportation, and emplacement of magma in continental crust**Oral Presentation July 21 AM2 (10:45-12:30) Room A2****Chair: Katsuya Kaneko, George W Bergantz**

July 21 10:45-11:15	1A2_1C-O1 Invited	Anatomy of an Arc Section: A MASH Zone Revealed	George W Bergantz, Barry Walker, Juan Otamendi	George W Bergantz
July 21 11:15-11:30	1A2_1C-O2	Crustal magmatism as recorded in Ignimbrite Flare-ups	Shanaka L de Silva	Shanaka L de Silva
July 21 11:30-11:45	1A2_1C-O3	Role of density contrast on magmatic architecture in the Earth's crust	Benoit Taisne	Benoit Taisne
July 21 11:45-12:00	1A2_1C-O4	Physical controls on the frequency and magnitude of volcanic eruptions	Luca Caricchi, Catherine Annen, Jon Blundy	Luca Caricchi
July 21 12:00-12:15	1A2_1C-O5	The dynamics of magma recharge in persistently active basaltic andesite systems	Joaquin A Cortes	Joaquin A Cortes
July 21 12:15-12:30	1A2_1C-O6	Rhythm of magma transport in deformable porous media	Ichiro Kumagai, Kei Kurita, Yuichi Murai, Other	Ichiro Kumagai

1E. The dynamics of geothermal systems**Oral Presentation July 21 AM1 (8:45-10:30) Room A3****Chair: Guido Giordano, Darren Gravely, Hirofumi Muraoka**

July 21 8:45-9:00	1A1_1E-O1 Invited	When circulation gets tough, the TOUGH gets going. Modeling of hydrothermal fluid circulation in active volcanic areas	Micol Todesco	Micol Todesco
July 21 9:00-9:15	1A1_1E-O2	Estimation of carbon dioxide emission from Kuju Volcano, Japan, and its numerical modeling	Yasuhiro Fujimitsu, Norihide Maeda, Sachio Ehara, Other	Yasuhiro Fujimitsu
July 21 9:15-9:30	1A1_1E-O3	The Bolsena-torre affina geothermal field (Italy): a case of caldera-related blind geothermal resource	Guido Giordano, Gabriele Berardi, Claudio Chiarabba, Other	Guido Giordano
July 21 9:30-9:45	1A1_1E-O4	U-Pb dating of zircon as an aid in interpretation of geothermal systems: a case study from the Kawerau Geothermal Field, New Zealand	Sarah D Milicich, Colin JN Wilson, Greg Bignall, Other	Sarah D Milicich
July 21 9:45-10:00	1A1_1E-O5 Invited	Concept of the Japan Beyond-Brittle Project (JBBP) for new frontier of geothermal power generation	Hiroshi Asanuma, Hirofumi Muraoka, Noriyoshi Tsuchiya, Other	Hiroshi Asanuma
July 21 10:00-10:15	1A1_1E-O6	The preliminary conceptual model of Tolehu geothermal resource based on geology, geochemistry and MT data	Asnawir Nasution, Endro Supriyanto, Tjahjo Sasmojo, Other	Zulkarnain Nasution
July 21 10:15-10:30	1A1_1E-O7	A business model of hot spring power generation and its current progress in Japan	Hirofumi Muraoka, Seiichiro Ioka, Norio Yanagisawa, Other	Hirofumi Muraoka

1E .The dynamics of geothermal systems Oral Presentation July 21 AM2 (10:45-12:30) Room A3 Chair: Shaul Hurwitz, Eisuke Fujita, Bruce Christenson				
July 21 10:45-11:00	1A2_1E-O8 Invited	Magmatic and Hydrothermal Activity in the East African Rift	Juliet Biggs, William Hutchison, Matthew Wilks, Other	Juliet Biggs
July 21 11:00-11:15	1A2_1E-O9	Magmatic vapor plumes in active volcanoes: dynamics, discharge and disasters	Richard Henley	Richard Henley
July 21 11:15-11:30	1A2_1E-O10	Understanding phreatic & hydrothermal explosion dynamics: insights into the energy conversion based on lab experiments	Bettina Scheu, Donald B Dingwell	Bettina Scheu
July 21 11:30-11:45	1A2_1E-O11 Invited	New Insights on the structure and dynamics of geysers	Jean Vandemeulebrouck, Shaul Hurwitz, Philippe Roux, Other	Jean Vandemeulebrouck
July 21 11:45-12:00	1A2_1E-O12	Eruptions at Lone Star Geyser, Yellowstone National Park, USA: Energetics and Eruption Dynamics	Leif Karlstrom, Shaul Hurwitz, Robert Sohn, Other	Leif Karlstrom
July 21 12:00-12:15	1A2_1E-O13	Imaging seismic source variations throughout the eruptive sequences of volcanoes and geysers using back-projection methods	Cyndi L Kelly, Jesse F Lawrence	Cyndi L Kelly
July 21 12:15-12:30	1A2_1E-O14	First results from the broadband seismological network at Wayang Windu geothermal area, West Java, Indonesia	Philippe Jousset, Andri Hendriyana, Makky Jaya, Other	Philippe Jousset
3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits Oral Presentation July 21 AM1 (8:45-10:30) Room A4 Chair: Gert Lube, Greg Valentine, Domenico Doronzo				
July 21 8:45-9:15	1A1_3G-O1 Invited	Inverting pyroclastic flow deposits from the characteristics of substrate-derived clasts: an experimental investigation	Olivier Roche, Anne Mangeney, Yarko Niño, Other	Olivier Roche
July 21 9:15-9:30	1A1_3G-O2 Invited	Modeling dynamics and sedimentation of dilute pyroclastic density currents	Amanda B Clarke, Brittany D Brand, Barry Voigt	Amanda B Clarke
July 21 9:30-9:45	1A1_3G-O3	Pyroclastic Density Currents from the May 18th, 1980 Eruption of Mt St Helens (Washington, USA) - Uncovering the influence of surface roughness, substrate erosion and self-channelization	Brittany D Brand, Nicholas Pollock, Chelsea Mackaman-Lofland, Other	Brittany D Brand
July 21 9:45-10:00	1A1_3G-O4	The control of source processes and topography on the dynamics of devastating pyroclastic density currents generated during the Merapi 2010 eruption	Jean-Christophe Komorowski, Susanna Jenkins, Peter Baxter, Other	Jean-Christophe Komorowski
July 21 10:00-10:15	1A1_3G-O5	Merapi 2010 eruption: An interdisciplinary approach to constraining pyroclastic density current dynamics	Susanna Jenkins, Jean-Christophe Komorowski, Peter Baxter, Other	Susanna Jenkins
July 21 10:15-10:30	1A1_3G-O6	Ground Penetrating Radar and Terrestrial Laser Scanner survey on cross-stratified overbank deposits from the 2006 eruption of Tungurahua volcano, Ecuador.	Guilhem A Douillet, Jean R Dujardin, Amir Abolghasem, Other	Guilhem A Douillet
3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits Oral Presentation July 21 AM2 (10:45-12:30) Room A4 Chair: Richard Brown, Pierfrancesco Dellino, Adam Neather				
July 21 10:45-11:15	1A2_3G-O7 Invited	Assessing pyroclastic density currents hazard by means of complex multiphase flow models	Tomaso Esposti Ongaro, Augusto Neri, Simone Orsucci	Tomaso Esposti Ongaro
July 21 11:15-11:30	1A2_3G-O8 Invited	Laboratory experiments on transport and deposition of granular flows over a variable break in slope: insights for depositional behaviour of pyroclastic and volcanoclastic density currents	Roberto Sulpizio, Damiano Sarocchi, Roberto Bartali, Other	Roberto Sulpizio
July 21 11:30-11:45	1A2_3G-O9	Latest explosive eruptive episodes of Ulleung Island, Korea: eruption styles, transport mechanisms, and stratigraphy of an intra-caldera tephra sequence	Gi Bom Kim, Shane J. Cronin, Woo Seok Yoon, Other	Gi Bom Kim
July 21 11:45-12:00	1A2_3G-O10	Building collapse and density current in volcanology via engineering	Marco D. de Tullio, Domenico M. Doronzo, Giuseppe Pascazio, Other	Domenico M. Doronzo
July 21 12:00-12:15	1A2_3G-O11	Friction properties controlling deposit shape of dense pyroclastic flows: insights from recent dome collapse events in Soufriere Hills Volcano, Montserrat	Fukashi Maeno, R Stephen J Sparks, Andrew J Hogg, Other	Fukashi Maeno
July 21 12:15-12:30	1A2_3G-O12	Comparing block and ash pyroclastic flow deposits and debris flow deposits from the 1990-1995 Mount Unzen Eruption (Heisei-Shinzan), Kyushu, Japan: implications for hazard assessment	Dan Uehara, Ray A.F. Cas, Shinji Takarada, Other	Dan Uehara
3B. Monogenetic volcanism Oral Presentation July 21 AM1 (8:45-10:30) Room A5 Chair: Kim Genareau, Karoly Nemeth				
July 21 8:45-9:00	1A1_3B-O1	Episodic triggering of the rise of resident small-scale basaltic magmas from the mantle	Ian E M Smith, Lucy E McGee, Shane J Cronin, Other	Ian E M Smith
July 21 9:00-9:15	1A1_3B-O2	Depth of melt segregation below the Nyos maar-diatreme volcano (Cameroon, West-Africa): major-trace element evidence and their bearing on the origin of CO ₂ in Lake Nyos	Festus Tongwa Aka, Tetsuya Yokoyama, Asaah Elvis Nkenmatia Asobo, Other	Festus Tongwa Aka
July 21 9:15-9:30	1A1_3B-O3	Petrology and geochemistry of the New Tolbachik Fissure Eruption volcanic rocks and their evolution during the first two weeks of eruption	Anna O. Volynets, Dmitry Melnikov, Anton Yakushev, Other	Anna O. Volynets

July 21 9:30-9:45	1A1_3B-O4	Magma ascent and fragmentation in a silica-undersaturated monogenetic volcanic field: evidence from textural analysis of pyroclasts from the Gregory Rift (East African Rift System)	Hannes B Mattsson	Hannes B Mattsson
July 21 9:45-10:00	1A1_3B-O5	Chemical variation in an historical monogenetic eruption (1256 AD Al-Madinah eruption) in the Kingdom of Saudi Arabia: Identifying magma sources	Hugo F Murcia, Jan M Lindsay, Ian EM Smith, Other	Hugo F Murcia
July 21 10:00-10:15	1A1_3B-O6	Mantle domain boundary beneath the Jicin Volcanic Field, Czech Republic: evidence from isotopic composition of primitive alkaline basaltic rocks	Vladislav Rapprich, Vojtech Erban, Jitka Mikova, Other	Vladislav Rapprich
July 21 10:15-10:30	1A1_3B-O7	Small calc-alkaline volcanoes from the Oas-Gutâi Neogene volcanic area, Eastern Carpathians, Romania; contribution to the controversial monogenetic versus polygenetic classification	Marinel Kovacs, Alexandrina Fülöp, Zoltan Pécskay	Marinel Kovacs

3B. Monogenetic volcanism

Oral Presentation July 21 AM2 (10:45-12:30) Room A5

Chair: Marco Brenna, Pierre-Simon Ross

July 21 10:45-11:00	1A2_3B-O8	The eruptive history of the small and isolated andesitic Caraci Volcano, developed adjacent to Z rand Basin, South Apuseni Mountains, Romania.	R zvan-Gabriel Popa, Ioan Seghedi	Răzvan-Gabriel Popa
July 21 11:00-11:15	1A2_3B-O9	Targeting monogenetic volcanoes from different angles to enhance our understanding of the complex eruption dynamics: case study Mt. Gambier, S.E. Australia (VEI 4)	Jozua van Otterloo, Ray A.F. Cas	Jozua van Otterloo
July 21 11:15-11:30	1A2_3B-O10	Using substrate geology to delimit the spectrum of phreatomagmatic eruptive scenarios for the Auckland Volcanic Field (AVF), New Zealand	Javier Agustin-Flores, Karoly Nemeth, Shane Cronin, Other	Javier Agustin-Flores
July 21 11:30-11:45	1A2_3B-O11	Factors influencing effusive and explosive eruptions of trachytic-phonolitic magmas, an example suite from Harrat Rahat, Saudi Arabia	Shane J Cronin, M. Rashad H Moufti, Marco Brenna, Other	Shane J Cronin
July 21 11:45-12:00	1A2_3B-O12	Highly explosive basaltic eruptions: the case of the sunset crater (az, usa)	Fabrizio Alfano, Laura Pioli, Amanda B. Clarke, Other	Fabrizio Alfano
July 21 12:00-12:15	1A2_3B-O13	Submarine fire-fountaining eruptions: monogenetic scoria cone construction and clast vesicularity (Nishiizu, Izu Peninsula, Japan)	Martin Jutzeler, James DL White	Martin Jutzeler
July 21 12:15-12:30	1A2_3B-O14	Variations in eruptive style of mexican basaltic maar volcanoes	Gerardo Carrasco-Nunez, Michael H. Ort, Pablo Davila-Harris	Gerardo Carrasco-Nunez

4A. Forecasting the weather and climate effects of volcanic eruptions

Oral Presentation July 21 AM1 (8:45-10:30) Room A6

Chair: Alan Robock, Anja Schmidt

July 21 8:45-9:00	1A1_4A-O1	Importance of satellite-based volcanic aerosol data sets for climate simulations	Jean-Paul Vernier, Larry W Thomason	Jean-Paul Vernier
July 21 9:00-9:15	1A1_4A-O2	Impact of stratospheric volcanic aerosols on the daily temperature range (DTR) in Europe over the past 200 years: observations vs. model simulations	Renate Auchmann, Martin Wegmann, Florian Arfeuille, Other	Renate Auchmann
July 21 9:15-9:30	1A1_4A-O3	No persistent North Atlantic Cooling during the Little Ice Age in Paleoclimate Modelling Intercomparison Project 3 Last Millennium Simulations	Mira Berdahl, Alan Robock	Alan Robock
July 21 9:30-9:45	1A1_4A-O4 Invited	Importance of tropospheric volcanic aerosol for indirect radiative forcing of climate	Anja Schmidt	Anja Schmidt
July 21 9:45-10:00	1A1_4A-O5 Invited	The role of volcanic forcing on northern hemisphere decadal to multidecadal climate variability and future carbon cycle	Odd Helge Otterå, Jerry Tjiputra, Tao Wang	Odd Helge Otterå
July 21 10:00-10:15	1A1_4A-O6	Deciphering the climatic effects of volcanic aerosols: what will happen when the next Tambora-like event occurs?	Stephen Self	Stephen Self
July 21 10:15-10:30	1A1_4A-O7	Volcanic eruptions as an analog for geoengineering	Alan Robock	Alan Robock

4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning

Oral Presentation July 21 AM2 (10:45-12:30) Room A6

Chair: Tina Neal, Andrew Tupper

July 21 10:45-11:00	1A2_4F-O1	Outcomes of the International Volcanic Ash Task Force 2010 2012	Andrew Tupper, Peter Lechner, Greg Brock, Other	Andrew Tupper
July 21 11:00-11:15	1A2_4F-O2	First-order estimates of economic losses from ash fall for some Asian mega cities	Russell Blong, Susanna Jenkins, Christina Magill, Other	Russell Blong
July 21 11:15-11:30	1A2_4F-O3	Airborne in-situ measurement of Sakurajima volcanic ash plume with light aircrafts and optical particle counters	Nario Yasuda, Jonas Eliasson, Andreas Vogel, Other	Nario Yasuda
July 21 11:30-11:45	1A2_4F-O4	The volcanic ash dispersion of the Aira super-eruption, Japan	Chang-Hwa Chen, Tein-Nan Yang	Chang-Hwa Chen
July 21 11:45-12:00	1A2_4F-O5	Polarimetric radar observations of volcanic eruptions	Masayuki Maki, Takeshi Maesaka, Tomofumi Kozono	Masayuki Maki
July 21 12:00-12:15	1A2_4F-O6	Review of past aircraft volcanic ash encounters in Japanese airspace involving international airlines	Saburo Onodera	Saburo Onodera

July 21 12:15-12:30	1A2_4F-O7	Investigation of the impacts of volcanic eruption on flight passengers and cargo: A case study of Sakurajima volcano	Tetsuya Tamaki, Hirokazu Tatano, Yoshio Kajitani	Tetsuya Tamaki
2D. Imaging and monitoring of volcanic activity Oral Presentation July 21 AM1 (8:45-10:30) Room B1 Chair: Jacques Zlotnicki, Yoichi Sasai				
July 21 8:45-9:15	1A1_2D-O1 Invited	Volcanic lightning: New global observations and constraints on source mechanisms	Stephen R McNutt, Edward Venzke, Earle R Williams	Stephen R McNutt
July 21 9:15-9:30	1A1_2D-O2	Volcano deformation in Kyushu (SW Japan) through InSAR data	Adriano Nobile, Daniele Trippanera, Susanna Pepe, Other	Adriano Nobile
July 21 9:30-9:45	1A1_2D-O3	Three dimensional resistivity structure of Kirishima volcanoes inferred from magnetotelluric data	Koki Aizawa, Takao Koyama, Hideaki Hase, Other	Koki Aizawa
July 21 9:45-10:00	1A1_2D-O4	On thermal demagnetization before the 2011 summit eruption of Mt. Shinmoe-dake, the Kirishima volcano group, in S Kyushu, SW Japan	Makoto Uyeshima, Takao Koyama, Tsuneomi Kagiya	Makoto Uyeshima
July 21 10:00-10:15	1A1_2D-O5	Integrated processing of muon radiography and gravity anomaly data toward realizing high-resolution 3D density structural analysis of volcanoes: case study of Showa-Shinzan lava dome, Usu, Japan.	Ryuichi Nishiyama, Yoshiyuki Tanaka, Shuhei Okubo, Other	Ryuichi Nishiyama
July 21 10:15-10:30	1A1_2D-O6	Ionospheric disturbances recorded by DEMETER satellite over active volcanoes: August 2004 to December 2010	Jacques Zlotnicki, Li Feng, Michel Parrot	Jacques Zlotnicki
2D. Imaging and monitoring of volcanic activity Oral Presentation July 21 AM2 (10:45-12:30) Room B1 Chair: Steve Mc Nutt, Gilda Currenti				
July 21 10:45-11:00	1A2_2D-O7	A new 2012 submarine volcanic activity off the western coast of El Hierro (Canary Islands, Spain): evidences from acoustic imaging and precursory signatures	Nemesio M. Perez, Luis Somoza, Luis Gonzales de Vallejo, Other	Nemesio M. Perez
July 21 11:00-11:15	1A2_2D-O8	Locating changes associated to volcanic eruptions at Piton de la Fournaise using ambient seismic noise cross-correlations	Anne Obermann, Thomas Planes, Berenice Froment, Other	Anne Obermann
July 21 11:15-11:30	1A2_2D-O9	Numerical modeling and inversion of multidisciplinary dataset at Mt Etna: from geophysical observations toward volcano hazard assessment	Gilda M Currenti, Armando Coco, Rosalba Napoli, Other	Gilda M Currenti
July 21 11:30-11:45	1A2_2D-O10	Magnetic source inversion for a triaxial ellipsoid using the genetic algorithm	Yoichi Sasai	Yoichi Sasai
July 21 11:45-12:00	1A2_2D-O11	Continuous heat accumulation beneath Tokachi-dake volcano, northern Japan, as inferred from magnetic total field changes	Ryo Tanaka, Takeshi Hashimoto, Kazuhiro Kawahashi, Other	Ryo Tanaka
July 21 12:00-12:15	1A2_2D-O12	Recent activity of Taal volcano (Philippines) inferred by electromagnetic and other geophysical monitoring networks: 2009-2012	Jacques Zlotnicki, Yoichi Sasai, Malcolm Johnston, Other	Jacques Zlotnicki
July 21 12:15-12:30	1A2_2D-O13	Implications to the volcanic activity of a large hydrothermal reservoir beneath Taal Volcano (Philippines) as revealed by magnetotelluric observations	Paul Karson B Alanis, Yusuke Yamaya, Akihiro Takeuchi, Other	Paul Karson B Alanis
2F. Stress, strain, and mass changes at active volcanoes Oral Presentation July 21 AM1 (8:45-10:30) Room B2 Chair: Joachim Gottsmann, Yosuke Aoki, Martha K Savage				
July 21 8:45-9:00	1A1_2F-O13	Seismic anisotropy on active volcanoes	Martha K Savage, Yosuke Aoki, Ruamoko Rumbles	Martha K Savage
July 21 9:00-9:15	1A1_2F-O14 Invited	The interplay of crustal stress and structure at Kilauea Volcano inferred from seismic anisotropy	Jessica H Johnson, Michael P Poland	Jessica H Johnson
July 21 9:15-9:30	1A1_2F-O15	Geodetic and seismic models of the 2007 May 24 earthquakes at Kilauea Volcano, Hawai'i	Christelle Wauthier, Diana Roman, Mike Poland	Christelle Wauthier
July 21 9:30-9:45	1A1_2F-O16	The stress shadow induced by the 1975 - 1984 Krafla rifting episode	Francesco Maccaferri, Eleonora Rivalta, Luigi Passarelli, Other	Eleonora Rivalta
July 21 9:45-10:00	1A1_2F-O17	A precursory process of the 1914 eruption of the Sakurajima volcano inferred from experience of residents	Masato Iguchi	Masato Iguchi
July 21 10:00-10:15	1A1_2F-O18	Revisiting the 1986 eruption of Miharayama, Izu-Oshima, Japan: new constraints on the magmatic system by combining strain, tilt and level line data.	Alan T Linde, Osamu Kamigaichi, M Churei, Other	Alan T Linde
July 21 10:15-10:30	1A1_2F-O19	The surface manifestations of cyclic tilt at Volcán Santiaguito (Guatemala)	Jeffrey B Johnson, Benjamin J Andrews, John J Lyons	Jeffrey B Johnson
2F. Stress, strain, and mass changes at active volcanoes Oral Presentation July 21 AM2 (10:45-12:30) Room B2 Chair: Nicolas Fournier, Joachim Gottsmann, Yosuke Aoki				
July 21 10:45-11:00	1A2_2F-O20 Invited	Shallow dike injection at Mt. Etna in May 2008 imaged by dense GPS and DInSAR data: interaction between magma and flank dynamics	Alessandro Bonforte, Francesco Guglielmino, Giuseppe Puglisi	Giuseppe Puglisi
July 21 11:00-11:15	1A2_2F-O21	From subduction processes to volcanic unrest: unravelling domino effects at Lake Taupo caldera, New Zealand	Nicolas Fournier, Charles Williams, Laura Wallace, Other	Nicolas Fournier

July 21 11:15-11:30	1A2_2F-O22	Dynamic coupling of Mauna Loa and Kilauea, Hawaii	Helge M Gonnermann, James H Foster, Michael Poland, Other	Helge M Gonnermann
July 21 11:30-11:45	1A2_2F-O23	Deep magmatic unrest: ground uplift and magma rise at Uturuncu volcano	James Hickey, Jo Gottsmann, Rodrigo del Potro	James Hickey
July 21 11:45-12:00	1A2_2F-O24	Crustal deformation during the 2011-2013 volcanic activity of El Hierro, Canary Islands, monitored by continuous GPS observation	Takeshi Sagiya, Jose Barrancos Martinez, David Calvo, Other	Takeshi Sagiya
July 21 12:00-12:15	1A2_2F-O25	Tracking magma migration in near-real time, the FUTUREVOLC supersite approach	Andrew Hooper, Karsten Spaans, Freysteinn Sigmundsson	Andrew Hooper
July 21 12:15-12:30	1A2_2F-O26	Detection of cyclic behaviors and characterization of magma storage at andesitic volcanoes using regional InSAR time series surveys	Estelle Chaussard, Falk Amelung, Yosuke Aoki	Falk Amelung

PROGRAM**July 21, PM**

Date/Time	No.	Title	Authors	Presenter
2H. Dynamics of volcanic processes				
Oral Presentation July 21 PM1 (15:00-16:45) Room A1				
Chair: Michael Dungan, Takahiro Miwa, Tomaso Ongaro				
July 21 15:00-15:15	1P1_2H-O8	Bubble coalescence in magmas: Insights from in-situ high-temperature synchrotron-based X-ray tomographic microscopy	Mattia Pistone, Luca Caricchi, Julie Fife, Other	Peter Ulmer
July 21 15:15-15:30	1P1_2H-O9	Effects of Shear Strain on the Deformation and Degassing of Highly Viscous Magmas	Jessica K Shields, Luca Caricchi, David Floess, Other	Jessica K Shields
July 21 15:30-15:45	1P1_2H-O10	Foam collapse in conduits and its implications for eruption transitions and volcano monitoring.	Ben M Kennedy, Fabian Wadsworth, Mark A Jellinek, Other	Ben M Kennedy
July 21 15:45-16:00	1P1_2H-O11	A new model for bubble growth, deformation and coalescence in viscous magmas	Christian Huber, Yanqing Su, Chinh Nguyen, Other	Christian Huber
July 21 16:00-16:15	1P1_2H-O12	Thermo-rheological feedbacks in silicic lavas and ignimbrites	Alan Whittington, Graham Andrews, Geoffroy Avar, Other	Alan Whittington
July 21 16:15-16:30	1P1_2H-O13	Crystal shape exerts a first order control on magma rheology	Edward W Llewellyn, Sebastian P Mueller, Heidi M Mader	Edward W Llewellyn
July 21 16:30-16:45	1P1_2H-O14	Non-Newton Man: An exploration of magmatic shear thinning sources.	Benoit Cordonnier, Thibault Duretz, Philippe Yamato, Other	Benoit Cordonnier
2H. Dynamics of volcanic processes				
Oral Presentation July 21 PM2 (17:00-18:45) Room A1				
Chair: Hugh Tuffen, Jacopo Taddeucci, Heather Wright				
July 21 17:00-17:15	1P2_2H-O15	The formation and hydration of cracks in cooling volcanic glass	Felix W von Aulock, Ben Kennedy, Christopher Oze, Other	Felix W von Aulock
July 21 17:15-17:30	1P2_2H-O16	Ductile and brittle processes of permeability development and outgassing during hybrid explosive-effusive activity at Cordon Caulle, Chile (2011-12)	C Ian Schipper, Jonathan M Castro, Hugh Tuffen, Other	C Ian Schipper
July 21 17:30-17:45	1P2_2H-O17	Volcanic pseudotachylyte and self-driven stick-slip motion	Jackie E. Kendrick, Yan Lavallee, Takehiro Hirose, Other	Jackie E. Kendrick
July 21 17:45-18:00	1P2_2H-O18	Relating vesicle shapes in pyroclasts to eruptions styles	Pranabendu Moitra, Helge M Gonnermann, Bruce F Houghton, Other	Pranabendu Moitra
July 21 18:00-18:15	1P2_2H-O19	The significance of the opening angle of pyroclast ejection during explosive volcanic eruptions	Ulrich Kueppers, Miguel A Alatorre-Ibarguengoitia, Joern Sesterhenn, Other	Ulrich Kueppers
July 21 18:15-18:30	1P2_2H-O20 Invited	Continuous survey of ash particles by automatic sampling system and field survey	Taketo Shimano, Masato Iguchi, Takeshi Nishimura	Taketo Shimano
July 21 18:30-18:45	1P2_2H-O21	Temporal variation in volcanic ash texture during single vulcanian eruption at Sakurajima volcano, Japan, revealed by real-time collection of ash samples	Takahiro Miwa, Nobuo Geshi, Hiroshi Shinohara	Takahiro Miwa
1C. Generation, transportation, and emplacement of magma in continental crust				
Oral Presentation July 21 PM1 (15:00-16:45) Room A2				
Chair: Shan de Silva, Matthew E Pritchard				
July 21 15:00-15:15	1P1_1C-O7	Revisiting Magmatic Rocks of Sri Lanka: Evidence for an Ancient Accretionary Complex?	Sanjeewa P.K. Malaviarachchi	Sanjeewa P.K. Malaviarachchi
July 21 15:15-15:30	1P1_1C-O8	Petrogenesis and geodynamic significance of silicic volcanism in the western Trans-Mexican Volcanic Belt: the role of gabbroic cumulates.	Chiara Maria Petrone, Luca Ferrari, Teresa Orozco-Esquivel, Other	Chiara Maria Petrone
July 21 15:30-15:45	1P1_1C-O9	Fractional crystallization experiments from olivine-tholeiite to rhyolite at mid-crustal conditions and consequences for liquid extraction and magma transport	Peter Ulmer, Rohit Nandedkar, Othmar Muntener, Other	Peter Ulmer
July 21 15:45-16:00	1P1_1C-O10	Petrology and Geochemistry of Gede-Salak Volcano Northwest Java: Evolution of magmatic process	Idham Andri Kurniawan, Emmy Suparka, Mirzam Abdurrahman, Other	Idham Andri Kurniawan
July 21 16:00-16:15	1P1_1C-O11	Geochemistry of alkaline silicate-carbonatite rock associations within the intrusive complexes of Brava Island, Cape Verde	Daniel Weidendorfer, Hannes B Mattsson, Max W Schmidt	Daniel Weidendorfer

July 21 16:15-16:30	1P1_1C-O12	Experimental constraints on the storage conditions and evolution of alkaline lavas at Erebus volcano, Antarctica: A case for CO ₂ -dominated volcanism	Kayla Iacovino, Clive Oppenheimer, Bruno Scaillet, Other	Kayla Iacovino
July 21 16:30-16:45	1P1_1C-O13	Evaluating the role of crustal assimilation on the oxidation state of arc magmas	Stephanie B Grocke, Elizabeth Cottrell, Shanaka L de Silva, Other	Stephanie B Grocke
1C. Generation, transportation, and emplacement of magma in continental crust Oral Presentation July 21 PM2 (17:00-18:45) Room A2 Chair: Mitsuhiro Nakagawa, James E Quick				
July 21 17:00-17:15	1P2_1C-O14	Understanding the evolution of large-scale continental magmatic systems: a case study of the Purico-Chascon volcanic complex in northern Chile	Dale H Burns, Shanaka L de Silva, Frank J Tepley	Dale H Burns
July 21 17:15-17:30	1P2_1C-O15	Climate and elevation influence the geochemistry of large-volume silicic magmas: new $\delta^{18}\text{O}$ data from the Central Andes: with comparison to N America and Kamchatka	Chris B Folkes, Shan L de Silva, Ilya N Bindeman	Chris B Folkes
July 21 17:30-18:00	1P2_1C-O16 Invited	Combined geophysical constraints on magmatism in the continental crust of volcanic arcs: Focus on the PLUTONS project in the central Andes	Matthew E Pritchard, Michael E West, Doug H Christensen, Other	Matthew E Pritchard
July 21 18:00-18:15	1P2_1C-O17	Active diapiric ascent of silicic magma beneath the Bolivian Altiplano	Rodrigo del Potro, Mikel Diez, Cyril Muller, Other	Rodrigo del Potro
July 21 18:15-18:30	1P2_1C-O18	Mixing following assimilation-fractional crystallization at Cerro Uturuncu, Andean Central Volcanic Zone, SW Bolivia as revealed from in situ laser ablation isotopic analysis of plagioclase	Gary S. Michelfelder, Todd C. Feeley, Alicia D. Wilder, Other	Gary S. Michelfelder
July 21 18:30-18:45	1P2_1C-O19	Experimental constraints on the Altiplano-Puna Magma Body: a dacite factory in the Central Andean Volcanic Zone	Duncan D Muir, Jon D Blundy, Alison C Rust	Duncan D Muir
1E. The dynamics of geothermal systems Oral Presentation July 21 PM1 (15:00-16:45) Room A3 Chair: Bruce Christenson, Yasuhiro Fujimitsu, Shaul Hurwitz				
July 21 15:00-15:15	1P1_1E-O15	Reconstructing the volcanological and paleoenvironmental setting of an Archean Hollandaire Cu-Au volcanic hosted massive sulphide deposit, Murchison Domain, Yilgarn Craton, Western Australia	Raymond A.F. Cas, Patrick C. Hayman, Sarah Hull, Other	Raymond A.F. Cas
July 21 15:15-15:30	1P1_1E-O16	Understanding the volcanic processes, stratigraphy and mineralization of the archaic tectonic bore, jaguar and bentley volcanic massive sulphide deposits, yilgarn craton, western australia.	Ritipurna Das, Ray Cas, Patrick Hayman, Other	Ritipurna Das
July 21 15:30-15:45	1P1_1E-O17	Magma-related hydrothermal system in volcanic terrain: An example of the alteration in Unzen USDP-4 scientific drilling	Satoshi Hamasaki, Masaru Kurokawa, Hideo Hoshizumi, Other	Satoshi Hamasaki
July 21 15:45-16:00	1P1_1E-O18	Age dating volcanic springs in the Western Highlands of Cameroon, along the Cameroon Volcanic Line: a multi-tracer approach	Mengnjo Jude Wirmvem, Takeshi Ohba, Wilson Yetoh Fantong, Other	Mengnjo Jude Wirmvem
July 21 16:00-16:15	1P1_1E-O19	Chemical evolution within a hydrothermal fluid circulation system at the Aira caldera, Kyushu, Japan	Jun-ichiro Ishibashi, Shingo Hirao, Tatsuoaki Ono, Other	Jun-ichiro Ishibashi
July 21 16:15-16:30	1P1_1E-O20	Geochemistry of geothermal fluids in the active Liquiñe-Ofqui Fault System (Southern Andes Volcanic Zone, Chile).	Daniele Tardani, Pablo Sanchez, Pamela Perez, Other	Daniele Tardani
July 21 16:30-16:45	1P1_1E-O21	The Source to Surface Project: what are geochemical proxies really telling us about magmatic-hydrothermal systems in the Taupo Volcanic Zone, New Zealand?	Joshua M Blackstock, Darren Gravley, Simon Bloomberg, Other	Joshua M Blackstock
2B. Seismic triggering of volcanic eruptions and related activities Oral Presentation July 21 PM2 (17:00-18:45) Room A3 Chair: Matthew Pritchard, Michael Manga, Eisuke Fujita				
July 21 17:00-17:15	1P2_2B-O1	Response of mud volcanoes to earthquakes: role of static strains and frequency-dependence of ground motion	Michael Manga, Maxwell Rudolph, Marco Bonini	Michael Manga
July 21 17:15-17:30	1P2_2B-O2	How earthquake-induced static stress change could promote new volcanic eruptions: an example from the Southern Volcanic Zone, Chilean Andes	Fabio Luca Bonali, Claudia Corazzato, Alessandro Tibaldi	Fabio Luca Bonali
July 21 17:30-17:45	1P2_2B-O3 Invited	Remotely triggered seismic activity in Hakone volcano during and after the passage of surface waves from the 2011 M9.0 Tohoku-Oki earthquake	Yohei Yukutake, Masatoshi Miyazawa, Ryou Honda, Other	Yohei Yukutake
July 21 17:45-18:00	1P2_2B-O4 Invited	Volcanic subsidence triggered by the 2011 Mw 9.0 Tohoku earthquake, Japan	Yo Fukushima, Youichiro Takada	Yo Fukushima
July 21 18:00-18:15	1P2_2B-O5	Interactions among the Galapagos volcanoes triggered by earthquakes and eruptions	Falk Amelung, Scott Baker, Marco Bagnardi	Falk Amelung
July 21 18:15-18:30	1P2_2B-O6	Interactions between earthquake and volcano activity (average picture from worldwide catalogues)	jean robert grasso, agathe schmid	jean robert grasso
July 21 18:30-18:45	1P2_2B-O7	Temporal Relationships between Vertical-CLVD Earthquakes and Volcanic Unrest	Ashley Shuler, Meredith Nettles, Göran Ekström	Ashley Shuler

3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits**Oral Presentation July 21 PM1 (15:00-16:45) Room A4****Chair: Gert Lube, Greg Valentine, Domenico Doronzo**

July 21 15:00-15:15	1P1_3G-O13 Invited	Topographic effects on pyroclastic density current dynamics: examples from Merapi, Lascar and Soufriere Hills volcanoes	Sylvain J Charbonnier, Eliza Calder, Sarah Ogburn, Other	Sylvain J Charbonnier
July 21 15:15-15:30	1P1_3G-O14 Invited	The dynamics of pyroclastic density currents: experimental insights	Benjamin J Andrews, Michael Manga	Benjamin J Andrews
July 21 15:30-15:45	1P1_3G-O15	Experimental investigation of pyroclastic flows generated by continuous supply of material	Pete Rowley, Olivier Roche, Ray A. F. Cas, Other	Pete Rowley
July 21 15:45-16:00	1P1_3G-O16	Transformation of blast-like hydrothermal jets into highly mobile pyroclastic surges. New insights from the August 2012 Te Maari eruption	Eric Christophe Breard, Gert Lube, Shane J Cronin	Eric Christophe Breard
July 21 16:00-16:15	1P1_3G-O17	Transportation and deposition processes in pyroclastic flow and co-ignimbrite ash deposits from Mashu caldera volcano, eastern Hokkaido, Japan, inferred from grain size distribution	Takeshi Hasegawa, Takehiro Matsumura	Takeshi Hasegawa
July 21 16:15-16:30	1P1_3G-O18	Flow deposit and erosion processes in granular collapse over sloping beds	Maxime Farin, Anne Mangeney, Olivier Roche	Anne Mangeney
July 21 16:30-16:45	1P1_3G-O19	Un-channelized dam-break flows : effect of the lateral spreading on the flow dynamics.	Laurence Girolami, Anthony Wachs, Guillaume Vinay	Laurence Girolami

3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits**Oral Presentation July 21 PM2 (17:00-18:45) Room A4****Chair: Richard Brown, Pierfrancesco Dellino, Adam Neather**

July 21 17:00-17:30	1P2_3G-O20 Invited	Hurricane-triggered lahars at Volcán de Colima: evidences of flow dynamic from monitoring and field survey.	Lucia Capra, Matteo Roverato, Gianluca Groppelli, Other	Lucia Capra
July 21 17:30-17:45	1P2_3G-O21	The Possibility Hazards Mapping of Future Lahar on Merapi Volcano	Noer Cholik, Nurnaning Aisyah, Christina Widiwijayanti, Other	Noer Cholik
July 21 17:45-18:00	1P2_3G-O22	Lahar monitoring in the Belham Valley, Montserrat, West Indies: flood bores and flow behaviour	Melanie J Froude, Jenni Barclay, Paul Cole, Other	Melanie J Froude
July 21 18:00-18:15	1P2_3G-O23	Numerical modeling of the Mount Steller rock-ice avalanche flow history and it's associated seismic signal.	Laurent Moretti, Anne Mangeney, Yann Capdeville, Other	Anne Mangeney
July 21 18:15-18:30	1P2_3G-O24	Long runout debris avalanche emplacement and subsequent landscape response surrounding Mt Ruapehu, New Zealand	Manuela Tost, Shane J. Cronin, Jonathan N. Procter	Manuela Tost

3B. Monogenetic volcanism**Oral Presentation July 21 PM1 (15:00-16:45) Room A5****Chair: Pierre-Simon Ross, Marco Brenna**

July 21 15:00-15:15	1P1_3B-O15	Comparison of the volcanic geology of the Tacambaru-Puruaran (arc front) and the Zacapu (arc inland) areas in the Michoacan Guanajuato volcanic field, Mexico	Claus Siebe, Marie-Noelle Guilbaud, Sergio Salinas, Other	Claus Siebe
July 21 15:15-15:30	1P1_3B-O16	Experimental craters formed by single and multiple buried explosions and implications for volcanic craters with emphasis on maars	Greg A. Valentine, James D.L. White, Pierre-Simon Ross, Other	Greg A. Valentine
July 21 15:30-15:45	1P1_3B-O17	Magma withdrawal below ground-water table as a trigger to form large maars over high magma discharge rate fissure-fed lava spatter/scoria cones: the Al Wahbah Crater (Harrat Kishb, Saudi Arabia)	Karoly Nemeth, Mohammed Rashad Moufti, Nabil El-Masry, Other	Karoly Nemeth
July 21 15:45-16:00	1P1_3B-O18	Submarine monogenetic volcanism	Ken H Rubin, Robert W Embley	Ken H Rubin
July 21 16:00-16:15	1P1_3B-O19	The complex geometries of maar-diatremes determined from geophysical modelling techniques. Examples from the Newer Volcanics Province of south-eastern Australia	Teagan N Blaikie, Laurent Ailleres, Peter G Betts, Other	Teagan N Blaikie
July 21 16:15-16:30	1P1_3B-O20	Fly By Numbers: Using Mercury-DPM to explore the in-flight particle-particle interactions of 'ballistic' volcanic blocks	Leah M Courtland, Thomas Weinhart, Anthony Thornton	Leah M Courtland
July 21 16:30-16:45	1P1_3B-O21	Space-time evolution of monogenetic basaltic volcanism in the Garrotxa Volcanic Field, NE Iberian Peninsula.	Corrado Cimarelli, Federico Di Traglia, Guillem Gisbert Pinto, Other	Corrado Cimarelli

3B. Monogenetic volcanism**Oral Presentation July 21 PM2 (17:00-18:45) Room A5****Chair: Karoly Nemeth, Kim Genareau**

July 21 17:00-17:15	1P2_3B-O22	Structural controls of monogenetic volcanism	Joan Marti, Xevi Bolos, Stephanie Barde-Cabusson, Other	Joan Marti
July 21 17:15-17:30	1P2_3B-O23	Integrating temporal and spatial patterns of Quaternary Cascades eruptions with geochemistry, tomography and heat flow	Leif Karlstrom, Lah Kuan Loh, David Ramsey, Other	Leif Karlstrom
July 21 17:30-17:45	1P2_3B-O24	Spatial and temporal variations in volcanism younger than 4.5 ka in the Campi Flegrei active volcanic field	Roberto Isaia, Enrico Iannuzzi, Mauro Rosi, Other	Roberto Isaia
July 21 17:45-18:00	1P2_3B-O25	Volcanic hazard mapping based on eruptive histories and eruptive volumes - A case study from the Auckland Volcanic Field (New Zealand)	Gabor Kereszturi, Karoly Nemeth, Shane J. Cronin, Other	Gabor Kereszturi

July 21 18:00-18:15	1P2_3B-O26	Multidisciplinary approach to the hazard assessment for the Holocene Tenerife flank eruptions	Claudia Principe, Maria J Blanco, Daniele Giordano, Other	Claudia Principe
July 21 18:15-18:30	1P2_3B-O27	Mathematical Coupling of Geological Data as an Approach to Volcanic Hazard Analysis; Harrat Rahat, Saudi Arabia	Melody G Runge, Mark Bebbington, Shane J Cronin, Other	Melody G Runge
July 21 18:30-18:45	1P2_3B-O28	Using a Monte Carlo event-order model to compare spatio-temporal eruption forecasts in a monogenetic volcanic field	Mark S Bebbington	Mark S Bebbington

4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning

Oral Presentation July 21 PM1 (15:00-16:45) Room A6

Chair: Tina Neal, Andrew Tupper

July 21 15:00-15:15	1P1_4F-O8	Measurements and mapping of volcanic plumes with light aircraft, examples of research flights during eruptions of Eyjafjallajökull, Grimsvoetn and Etna	Konradin Weber, Jonas Eliasson, Andreas Vogel, Other	Konradin Weber
July 21 15:15-15:30	1P1_4F-O9 Invited	Sakurajima volcano: a physico-chemical study of the health consequences of long-term exposure to volcanic ash	Sarah E Hillman, Claire J Horwell, Alex L Densmore, Other	Claire J Horwell
July 21 15:30-15:45	1P1_4F-O10 Invited	Radon levels due to volcanic activities of Mt. Sakurajima	Shinji Tokonami, Masahiro Hosoda, Atsuyuki Sorimachi	Shinji Tokonami
July 21 15:45-16:00	1P1_4F-O11	Evolution in phase composition and morphology of volcanic aerosols during transport: the Eyjafjallajökull plume 2010	Bernard Grobety, Mario Meier, Cedric Botter, Other	Bernard Grobety
July 21 16:00-16:15	1P1_4F-O12	A new tool for assessing the hazards from leachable elements in volcanic ash	Carol Stewart, Claire Horwell, Shane Cronin, Other	Carol Stewart
July 21 16:15-16:30	1P1_4F-O13	Assessing tephra impacts on agricultural systems: the case for standardisation of an analysis protocol	Heather Craig, Thomas Wilson, Shane Cronin, Other	Heather Craig
July 21 16:30-16:45	1P1_4F-O14	Health effects of volcanic activities of Mt. Sakurajima	Suminori Akiba	Suminori Akiba

4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning

Oral Presentation July 21 PM2 (17:00-18:45) Room A6

Chair: Peter Baxter, Yasuhiro Ishimine

July 21 17:00-17:15	1P2_4F-O15	Therapeutic and health promoting effects of rehabilitation with balneotherapy	Shuji Matsumoto	Shuji Matsumoto
July 21 17:15-17:30	1P2_4F-O16	Prognosis for survival in burns victims rescued from dilute pyroclastic density currents at Merapi volcano, Indonesia	Peter J Baxter, Ken W Dunn, Susanna Jenkins, Other	Peter J Baxter
July 21 17:30-17:45	1P2_4F-O17	Future Icelandic eruptions and their potential health impacts in Europe	Peter J Baxter, Susan C Loughlin, Claire J Horwell	Peter J Baxter
July 21 17:45-18:00	1P2_4F-O18 Invited	What if a Laki-type eruption were to happen tomorrow?	Anja Schmidt, Bart Ostro, Kenneth S Carslaw, Other	Anja Schmidt

2D. Imaging and monitoring of volcanic activity

Oral Presentation July 21 PM1 (15:00-16:45) Room B1

Chair: Yoichi Sasai, Jacques Zlotnicki

July 21 15:00-15:15	1P1_2D-O14	3D imaging clay-cap and underlying gas reservoir by magnetotelluric modeling and micro-earthquake monitoring at Kusatsu-Shirane volcano, Japan	Yasuo Ogawa, Nurhasan ., Sabri B. Tank, Other	Yasuo Ogawa
July 21 15:15-15:30	1P1_2D-O15	The oscillation theory generated by hydrothermal dynamics beneath Aso Volcano, southwest Japan: A new understanding using repeated absolute and relative gravity measurement	Yayan Sofyan, Yayan Sofyan, Shin Yoshikawa, Other	Yayan Sofyan
July 21 15:30-15:45	1P1_2D-O16	Measuring vertical gravity gradients in volcanic areas using an interferometric gravity gradiometer	Sachie Shiomi, Tsuneomi Kagiya, Shin Yoshikawa	Sachie Shiomi
July 21 15:45-16:00	1P1_2D-O17	Shallow structures of the rift zone in northern Iceland	Sion Hughes, Hazel Rymer	Sion Hughes
July 21 16:00-16:15	1P1_2D-O18	3D thermal structure of the Hengill volcanic complex (Iceland) revealed from electromagnetic sounding data and temperature well logs	Viacheslav V. Spichak, Olga K. Zakharova, Alexandra G. Goidina	Viacheslav V. Spichak
July 21 16:15-16:30	1P1_2D-O19	Structural imaging in Papandayan Volcano, Indonesia using Magnetotelluric and other geophysical methods	Nurhasan, Doddy Sutarno, Wahyu Srigutomo, Other	Nurhasan
July 21 16:30-16:45	1P1_2D-O20	Density muon tomography of La Soufrière of Guadeloupe lava dome	Dominique Gibert, Jacques Marteau, Nolwenn Lesparre, Other	Dominique Gibert

2D. Imaging and monitoring of volcanic activity

Oral Presentation July 21 PM2 (17:00-18:45) Room B1

Chair: Hiroyuki Tanaka, Raffaello D'Alessandro

July 21 17:00-17:15	1P2_2D-O21	The MU-RAY project: volcano radiography with cosmic ray muons.	Raffaello D'Alessandro, Fabio Ambrosino, Lorenzo Bonechi, Other	Raffaello D'Alessandro
July 21 17:15-17:30	1P2_2D-O22	Muon radiography of the Puy de Dôme by the Tomuvol collaboration: status and prospects.	Valentin Niess, on behalf of the Tomuvol collaboration	Valentin Niess
July 21 17:30-17:45	1P2_2D-O23	Inner structure of a lava dome: comparison of geophysical models	Angelie Portal, Philippe Labazuy, Jean-Francois Lenat, Other	Angelie Portal
July 21 17:45-18:00	1P2_2D-O24	Development of multilayer muography for imaging a middle-scale volcano	Taro Kusagaya, Hiroyuki K.M. Tanaka, Akimichi Taketa, Other	Taro Kusagaya
July 21 18:00-18:15	1P2_2D-O25	Imaging the internal density structure of the lava dome in Unzen, Japan	Seigo Miyamoto, Hiroshi Shimizu, Takeshi Matsushima, Other	Seigo Miyamoto

July 21 18:15-18:30	1P2_2D-O26	Muon radiography of Stromboli volcano with nuclear emulsions	Valeri Tioukov, Giovanni De Lellis, Andrey Aleksandrov, Other	Valeri Tioukov
July 21 18:30-18:45	1P2_2D-O27	Muon radiography by nuclear emulsions: data acquisition and processing	Cristiano Bozza, Lucia Consiglio, Nicola D'Ambrosio, Other	Cristiano Bozza

3J. Carbon dioxide emission from volcanoes and tectonically active regions

Oral Presentation July 21 PM1 (15:00-16:45) Room B2

Chair: Tobias Fisher, Hugo Delgado

July 21 15:00-15:15	1P1_3J-O1	Quantifying carbon dioxide flux from dormant volcanoes with low-temperature fumarolic activity: demonstration from measurements at la soufriere, guadeloupe, and campi flegrei, Italy	Alessandro Aiuppa, Patrick Allard, Francois Beauducel, Other	Alessandro Aiuppa
July 21 15:15-15:30	1P1_3J-O2	Detecting volcanic CO ₂ signals from space	Florian M Schwandner, Simon A Carn	Florian M Schwandner
July 21 15:30-15:45	1P1_3J-O3	CO ₂ dynamics in volcanic lakes from hydroacoustic and complementary measurements	Corentin J.L. Caudron, Alain Bernard	Corentin J.L. Caudron
July 21 15:45-16:00	1P1_3J-O4	CO ₂ emissions from soils as indicators of tectonic-volcanic activity at Monogenetic Volcanic Fields	Hugo Delgado Granados	Hugo Delgado Granados
July 21 16:00-16:15	1P1_3J-O5	Reevaluating the global CO ₂ emission from subaerial volcanism: an additional insight	Nemesio M. Perez, Pedro A. Hernandez, Eleazar Padron, Other	Nemesio M. Perez
July 21 16:15-16:30	1P1_3J-O6 Invited	Mantle carbon and sulfur fluxes in subduction zone	Yuji Sano, Takanori Kagoshima, Naoto Takahata, Other	Yuji Sano
July 21 16:30-16:45	1P1_3J-O7 Invited	Volcanic gas CO ₂ flux from Japanese volcanoes	Hiroshi Shinohara	Hiroshi Shinohara

3J. Carbon dioxide emission from volcanoes and tectonically active regions

Oral Presentation July 21 PM2 (17:00-18:45) Room B2

Chair: Hugo Delgado, Tobias Fisher

July 21 17:00-17:15	1P2_3J-O8	CO ₂ rich vents in Costa Rica: mantle volatiles behind the volcanic front	Tobias P Fischer, Reika Yokochi, Neil C Sturchio, Other	Tobias P Fischer
July 21 17:15-17:30	1P2_3J-O9	Carbon dioxide manifestations and related hazard along the Hellenic territory	Walter D'Alessandro, Konstantinos Kyriakopoulos	Walter D'Alessandro
July 21 17:30-17:45	1P2_3J-O10	Isotopic and mass balance constraints on the origin(s) of carbon dioxide emissions from Merapi volcano, central Java, Indonesia	Patrick Allard	Patrick Allard
July 21 17:45-18:00	1P2_3J-O11	Quantifying a soil CO ₂ flux baseline in an urban monogenetic volcanic field: the Auckland Volcanic Field, New Zealand	Elaine R Smid, Agnes Mazot, Luitgard Schwendenmann, Other	Elaine R Smid
July 21 18:00-18:15	1P2_3J-O12	He, CO ₂ and heat fluxes in Aira caldera, Kyushu, Japan: Evidence for distinct degassing activity at Wakamiko and Sakurajima volcanoes	Emilie Roulleau, Yuji Sano, Naoto Takahata, Other	Emilie Roulleau
July 21 18:15-18:30	1P2_3J-O13	Monitoring CO ₂ flux, gas geochemistry and heat output from El Chichon volcano, Mexico.	Mariana Patricia Jacome Paz, Salvatore Inguaggiato, Agnes Mazot, Other	Yuri Taran
July 21 18:30-18:45	1P2_3J-O14	Spatial and temporal variations of soil CO ₂ flux in geothermal areas of the Tatun Volcano Group, Northern Taiwan	Hsin-Yi Wen, Tsanyao F Yang, Tefang F Lan, Other	Tsanyao F Yang

1A. Volatiles, fluids, and melts in magmatic and metamorphic processes

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_1A-P1	P-wave velocity in the subducting crust of the Pacific plate: Role of aqueous fluids on seismogenesis	Takahiro Shiina, Junichi Nakajima, Toru Matsuzawa	Takahiro Shiina
July 21 Poster	1W_1A-P2	A three-dimensional electrical conductivity model in the subduction zone of Tohoku district, northeastern Japan	Masahiro Ichiki, Yasuo Ogawa, Tomotsugu Demachi, Other	Masahiro Ichiki
July 21 Poster	1W_1A-P3	3D Imaging of crustal fluids under the NE volcanic arc	Yasuo Ogawa, Masahiro Ichiki, Wataru Kanda, Other	Yasuo Ogawa
July 21 Poster	1W_1A-P4	Generation of TH and CA suite magmas in the Quaternary NE Japan arc	Toshiro Takahashi, Jun-Ichi Kimura, Yuka Hirahara, Other	Toshiro Takahashi
July 21 Poster	1W_1A-P5	Sr, Nd, Pb, and Hf isotopic composition of the Cretaceous to Paleogene plutonic rocks from the Asahi, Ashio, and Abukuma Belts, southern part of the NE Japan Arc	Shin-ichi Kagashima, Toshiro Takahashi, Yuka Hirahara, Other	Shin-ichi Kagashima
July 21 Poster	1W_1A-P6	Contrasting magmatic processes producing two coexisting rock series at Hakkoda, northern Honshu, Japan	Tsukasa Ohba, Sho Komatsu, Toshiro Takahashi, Other	Tsukasa Ohba
July 21 Poster	1W_1A-P7	Coexistence of mantle- and crust-derived island-arc tholeiites with associated calc-alkaline magma at Akita-Komagatake volcano, Northeast Japan arc	Akihiko Fujinawa, Masao Ban, Tsukasa Ohba, Other	Akihiko Fujinawa
July 21 Poster	1W_1A-P8	Geochemistry of potassic minerals in the Xiaogulihe-Keluo-Wudalianchi-Erkeshan volcanic rock belt, NE China and their geological implications	Ni Li, Liuyi Zhang, Yongwei Zhao, Other	Ni Li
July 21 Poster	1W_1A-P9	Recycling and melting of a dehydrated oceanic crust in the stagnant slab in back-arc mantle: Constraints from Cenozoic alkaline basalts in eastern China	Tetsuya Sakuyama, Wei Tian, Jun-Ichi Kimura, Other	Tetsuya Sakuyama
July 21 Poster	1W_1A-P10	Melting of clinopyroxene + magnesite and its role on the formation of CO ₂ -rich magmas	Audrey M. Martin, Kevin Righter	Audrey M. Martin

July 21 Poster	1W_1A-P11	Global variation in Fe-isotopic composition of arc basalts indicate a variably oxidised mantle wedge source?	John Foden, Paolo Sossi, Galen Halverson, Other	John Foden
July 21 Poster	1W_1A-P12	Estimation of slab-derived fluid contributions to arc magmas: a study of across-arc and along-arc variations of trace elements and isotopes of volcanic rocks from Java island, Sunda arc	Esti Handini, Toshiaki Hasenaka, Haryo Edi Wibowo, Other	Esti Handini
July 21 Poster	1W_1A-P13	Insights into subduction-zone melting processes from across-arc and down-slab variation in thermal and chemical parameters	Sebastian F.L. Watt, David M. Pyle, Tamsin A. Mather, Other	Sebastian F.L. Watt
July 21 Poster	1W_1A-P14	Estimation of slab-derived fluids using olivine-hosted melt inclusions collected from volcanoes in Kyushu, SW Honshu arc, Japan	Tomohisa Tamura, Toshiaki Hasenaka, Paul J. Wallace, Other	Toshiaki Hasenaka
July 21 Poster	1W_1A-P15	Hydrogen concentration in plagioclase as a hygrometer of arc basaltic melts: approaches from melt inclusion analyses and hydrous melting experiments	Morihisa Hamada, Masashi Ushioda, Toshitsugu Fujii, Other	Morihisa Hamada
July 21 Poster	1W_1A-P16	Replenishment of volatiles into a degassed chamber driving mixing and eruption of Tungurahua volcano	Madison L Myers, Dennis J Geist, Michael C Rowe, Other	Madison L Myers
July 21 Poster	1W_1A-P17	Use of attenuated total reflectance (ATR) FTIR spectroscopy to measure H ₂ O and CO ₂ in silicate glass	Jacob B Lowenstern, Bradley W Pitcher	Jacob B Lowenstern
July 21 Poster	1W_1A-P18	Determining molar absorption coefficients for rhyolitic glass	Alexander R Nichols, Robert B Stewart, Ian Schipper	Robert B Stewart
July 21 Poster	1W_1A-P19	Cogenetic distributions of deep fluids and earthquakes in Japan arc: Implications for slab fluid processes	Kohei Kazahaya, Masaaki Takahashi, Toru Matsuzawa, Other	Kohei Kazahaya
July 21 Poster	1W_1A-P20	CO ₂ and methane flux from the submerged Wakamiko Crater in Aira Caldera of Kagoshima Bay, southern Kyushu, Japan	Kazuna Kondo, Toshiro Yamanaka, Kento Saka, Other	Kazuna Kondo
July 21 Poster	1W_1A-P21	Large contribution of the magmatic water to the seafloor hydrothermal fluid at the Wakamiko hydrothermal field and its associated mineralization in Aira Caldera, southern Kyushu, Japan	Toshiro Yamanaka, Kotaro Maeto, Hironori Akashi, Other	Toshiro Yamanaka
July 21 Poster	1W_1A-P22	Subvent hydrothermal mineralization and rare metal accumulation within the unconsolidated sediments of Wakamiko submarine crater in Aira Caldera, southern Kyushu, Japan	Tomoki Kashimura, Youko Miyoshi, Yoshiko Furuzawa, Other	Tomoki Kashimura
July 21 Poster	1W_1A-P23	Three-dimensional magmatic volatile flux into the groundwater system around Kutcharo caldera, NE Hokkaido, Japan, based on measurements of helium isotopes in groundwater	Michiko Ohwada, Kohei Kazahaya, Noritoshi Morikawa, Other	Michiko Ohwada
July 21 Poster	1W_1A-P24	Synchrotron Radiation X-Ray Fluorescence Analysis of Aqueous Fluids and High-Magnesian Andesite Melt Under High-Temperature And High-Pressure Conditions	Tatsuhiko Kawamoto, Kenji Mibe, Ken-ichi Kuroiwa, Other	Tatsuhiko Kawamoto
July 21 Poster	1W_1A-P25	Mantle wedge infiltrated with saline fluids from dehydration and decarbonation of subducting slab	Tatsuhiko Kawamoto, Masako Yoshikawa, Yoshitaka Kumagai, Other	Tatsuhiko Kawamoto
July 21 Poster	1W_1A-P26	Halogen contents and Pb isotopes of olivine-hosted melt inclusions: mantle source heterogeneity for South Tyrrhenian magmas revealed.	Estelle F. Rose-Koga, Kenneth T. Koga, Pierre Schiano, Other	Estelle F. Rose-Koga
July 21 Poster	1W_1A-P27	Fluorine partitioning between hydrous minerals and aqueous fluid at 1 GPa and 770-947°C: A new constraint on slab flux	Jia Wu, Kenneth T Koga	Kenneth T Koga
July 21 Poster	1W_1A-P28 Invited	Distinguishing Shallow and Deep Sources of Halogens in Submarine Volcanic Systems	Erik H. Hauri	Erik H. Hauri
July 21 Poster	1W_1A-P29	Pore fluid-derived halogens and noble gases preserved in exhumed mantle wedge rocks from the subduction-type Sanbagawa metamorphic belt	Hirochika Sumino, Tomoyuki Mizukami, Shunsuke Endo, Other	Hirochika Sumino
July 21 Poster	1W_1A-P30	F and Cl release by hydrous melting of subducted oceanic crust	Greg Van den Bleeken, Kenneth T Koga	Greg Van den Bleeken
July 21 Poster	1W_1A-P31	Systematic classification of kimberlites and their xenoliths using I/Br ratios	Chiaki Toyama, Yasuyuki Muramatsu, Hirochika Sumino, Other	Chiaki Toyama
July 21 Poster	1W_1A-P32	Slab-derived halogens and noble gases in mantle peridotites from subduction zones	Masahiro Kobayashi, Hirochika Sumino, Takehiko Saito, Other	Masahiro Kobayashi
July 21 Poster	1W_1A-P33	Chlorine isotope variations in the hyper-acid lake system of Poás volcano, Costa Rica	Alejandro Rodríguez, María Martínez, Hans G.M. Eggenkamp, Other	Alejandro Rodríguez
July 21 Poster	1W_1A-P34	Fluorine and chlorine contents of volcanic ash discharged from Minamidake, Sakurajima volcano in the sequence of its eruptive activity	Izumi Sato, Kenji Nogami	Izumi Sato
July 21 Poster	1W_1A-P35	Behavior of fluorine and chlorine in the volcanic ash of the 2004 eruption of Asama volcano, Japan	Kenji Nogami, Shin'ya Onizawa	Kenji Nogami
July 21 Poster	1W_1A-P36	Origin of halogen in hot-spring water in Joban and Hamadori area, northeast Japan, inferred from ¹²⁹ I/I and ³⁶ Cl/Cl ratios	Yoko Togo, Kohei Kazahaya, Yuki Tosaki, Other	Yoko Togo
July 21 Poster	1W_1A-P37	Concentrations of halogen elements and ¹²⁹ I/ ¹²⁷ I ratios in highly saline groundwaters collected in Hokkaido	Nobuaki Okabe, Yasuyuki Muramatsu, Mikako Arai, Other	Nobuaki Okabe

1C. Generation, transportation, and emplacement of magma in continental crust				
Poster Presentation July 21 Core Time (13:30-15:00)				
July 21 Poster	1W_1C-P1	Volatiles in large crystal-rich dacitic magma chambers: insights from the Cebolla Creek Ignimbrite, San Juan Volcanic Field, Colorado	Madison L Myers, Paul J Wallace	Madison L Myers
July 21 Poster	1W_1C-P2	Simultaneous generation of multiple silicic magmas and their zoned magma chamber related to a caldera-forming eruption: Case studies of Shikotsu and Mashu volcanoes, Japan	Mitsuhiro Nakagawa, Jun-ichi Kitagawa, Hiroko Wakasa, Other	Mitsuhiro Nakagawa
July 21 Poster	1W_1C-P3	Petrogenetic processes generating magma beneath the Nyos maar volcano (Cameroon Volcanic Line, West Africa): field relation and geochemical characterization of volcanic rocks	Asobo Nkengmatia Elvis Asaah, Tetsuya Yokoyama, Festus Tongwa Aka, Other	Asobo Nkengmatia Elvis Asaah
July 21 Poster	1W_1C-P4	Clues to find out past lithospheric activities from lower crustal contaminated dikes of Deccan Volcanic Province, Ranale, India	Vishal Vasant Saindane	Vishal Vasant Saindane
July 21 Poster	1W_1C-P5	The 120 ka Largest Caldera-forming eruption of Kutcharo volcano (Kp IV), eastern Hokkaido, Japan (Part 1): Implications for successive pyroclastic flows from multiple vent system	Takeshi Hasegawa, Akiko Matsumoto, Mitsuhiro Nakagawa	Takeshi Hasegawa
July 21 Poster	1W_1C-P6	The 120 ka Largest Caldera-forming eruption of Kutcharo volcano (Kp IV), east Hokkaido, Japan (Part 2): Generation and Preeruptive processes of Large Silicic magma system with Multiple Silicic magmas	Akiko Matsumoto, Takeshi Hasegawa, Mitsuhiro Nakagawa	Akiko Matsumoto
July 21 Poster	1W_1C-P7	Field, petrological, and geochemical evidence for injection of mafic magma into felsic reservoirs at the Mono domes and Mono Lake islands, California	Brandon A Bray, John Stix	Brandon A Bray
July 21 Poster	1W_1C-P9	Generation mechanism of the Nanzaki basanite in northern part of Izu Volcanic arc, Japan: petrological and geochemical constraints	Yoji Arakawa, Junya Oshika, Daisuke Endo, Other	Yoji Arakawa
July 21 Poster	1W_1C-P10	Geology and petrology of Taisetsu volcano group, Hokkaido, Japan ; The outline of eruptive history and temporal variation of magma during 1 My	Kosuke Ishige, Mitsuhiro Nakagawa	Kosuke Ishige
July 21 Poster	1W_1C-P11	Sm-Nd mineral isochrons and trace element compositions of parent melts for Atsumi gabbroic xenoliths included in the late Miocene volcanic rocks, Atsumi area, western margin of NE Japan	Norie Fujibayashi, Hiroko Kondo, Hiroo Kagami, Other	Norie Fujibayashi
July 21 Poster	1W_1C-P12	Fuji 1707 Hoei Gabbro as a subvolcanic magma chamber by comparison with layered intrusions	Shigeko Togashi, Maya Yasui, Yasuhiro Shimomura	Shigeko Togashi
July 21 Poster	1W_1C-P13	Linking magma chamber evolution to eruptive history using a simplified numerical model	Wim Degruyter, Christian Huber	Wim Degruyter
July 21 Poster	1W_1C-P14	Development and relationship of monogenetic and polygenetic volcanic fields in time and space: from field observations to numerical modeling	Aurelie Germa, Chuck Connor, Laura Connor, Other	Aurelie Germa
July 21 Poster	1W_1C-P15	Amount, composition and timescale of magmas generated by melting in lower crust	Katsuya Kaneko	Katsuya Kaneko
July 21 Poster	1W_1C-P16	Modelling magma transport: a study of dyke injection under regional extensional stress	Katherine A Daniels, Thierry Menand, R.Stephen J Sparks	Katherine A Daniels
July 21 Poster	1W_1C-P17	Phenocryst fragmentation in crystalline silicic magma during explosive and effusive eruptions	Satoshi Okumura, Michihiko Nakamura, Shanaka de Silva, Other	Satoshi Okumura
July 21 Poster	1W_1C-P18	A possible link between ice lenses and gabbroic bands in peridotite complex	Tomotaka Saruya, Kei Kurita, Alan W Rempel	Tomotaka Saruya
July 21 Poster	1W_1C-P19	Factors controlling entablature formation in columnar joints: Suggestions from the analogue experiments and texture observation of water interacted structure in columnar joints in Iceland	Ai Hamada, Atsushi Toramaru, Thorvaldur Thordarson	Ai Hamada
1E .The dynamics of geothermal systems				
Poster Presentation July 21 Core Time (13:30-15:00)				
July 21 Poster	1W_1E-P1	Eruption due to depressurization: Numerical simulation by VERA code	Eisuke Fujita	Eisuke Fujita
July 21 Poster	1W_1E-P2	Features of geyser's eruptive activity in broadband seismic records (Valley of Geysers, Kamchatka)	Vadim Saltykov, Yulia Kugaenko	Vadim Saltykov
July 21 Poster	1W_1E-P3	Characterization and quantification of geyser eruptions: insights from infrasound monitoring at Yellowstone National Park	Philippa J Demonte, Jeffrey B Johnson	Philippa J Demonte
July 21 Poster	1W_1E-P4	Estimates of Heat output from the Yellowstone Plateau Volcanic Field using different approaches	Shaul Hurwitz, R Greg Vaughan, Jacob B Lowenstern	Shaul Hurwitz
July 21 Poster	1W_1E-P5	The response of geysers to stress and weather perturbations	Robert A Sohn, Karen Luttrell, Shaul Hurwitz	Shaul Hurwitz
July 21 Poster	1W_1E-P6	Filling geyser conduits between eruptions, as revealed by acoustic measurements in the El Tatio Geyser Field, Chile	Atsuko Namiki, Carolina Munoz, Shaul Hurwitz, Other	Atsuko Namiki
July 21 Poster	1W_1E-P7	A physical model for the phreatic explosion on July 15, 1888 at Bandai volcano, northeastern Japan	Hiroyuki Hamaguchi, Sadato Ueki, Haruhisa Nakamichi	Hiroyuki Hamaguchi
July 21 Poster	1W_1E-P8	Experimental constraints of phreatic eruptions at Solfatara volcano, Campi Flegrei	Cristian Montanaro, Bettina Scheu, Klaus Mayer, Other	Cristian Montanaro
July 21 Poster	1W_1E-P9	Experimental approach to constrain phreatic eruption processes on White Island, New Zealand	Klaus Mayer, Bettina Scheu, Yan Lavallée, Other	Klaus Mayer

July 21 Poster	1W_1E-P10	Campi Flegrei Deep Drilling Project and geothermal activities in Campania Region (Southern Italy)	Giuseppe De Natale, Claudia Troise, Stefano Carlino, Other	Giuseppe De Natale
July 21 Poster	1W_1E-P11	Geophysical changes and hydrothermal activity at the early stage of the White Island 2012 unrest episode	Lauriane Chardot, Bruce W. Christenson, Micol Todesco, Other	Lauriane Chardot
July 21 Poster	1W_1E-P12	Characteristics of seismicity within proximity to active geothermal and volcanic areas	Xiaowei Chen	Xiaowei Chen
July 21 Poster	1W_1E-P13	Stress Distribution in the Rotokawa Geothermal Field, New Zealand and implications for fluid flow through brittle crust	Jonathan R J Davidson, Paul Siratovich, Irene Wallis, Other	Jonathan R J Davidson
July 21 Poster	1W_1E-P14	Geological and geophysical model of cap rock of the Karymshinskaya hydrothermal system (Kamchatka)	Veronika Yu. Pavlova, Ivan F. Delemen	Veronika Yu. Pavlova
July 21 Poster	1W_1E-P15	The structure of iron-silica rich chimney in shallow marine hydrothermal environment at Iwo-Jima Island, Kikai caldera, southern Japan	Takashi Kuratomi, Shoichi Kiyokawa, Minoru Ikehara, Other	Takashi Kuratomi
July 21 Poster	1W_1E-P16	Hydrochemical properties of thermal and cold mineral waters of Khnagay Mountain Region, Mongol	D. Oyuntsetseg, D. Ganchimeg, G. Odontuya, Other	D. Oyuntsetseg
July 21 Poster	1W_1E-P17	Geochemical flow model of groundwater in Sho River fan, Toyama Prefecture for heat usage by geothermal heat	Kaname Iwatake, Akira Ueda, Shingo Tomiyama	Kaname Iwatake
July 21 Poster	1W_1E-P18	Geochemical study of hot springs for new geothermal exploration in eastern part of Toyama Prefecture, Japan	Kohei Sasaki, Akira Ueda, Soichiro Kageyama, Other	Kohei Sasaki
July 21 Poster	1W_1E-P19	GEOCHEMICAL EXPLORATION FOR GEOTHERMAL RESOURCES AT THE SE ZONE OF GRAN CANARIA ISLAND (ATIDAMA MINING GRID), CANARY ISLANDS.	Fatima Rodriguez, Nemesio Perez, Pedro Hernandez, Other	Fatima Rodriguez
July 21 Poster	1W_1E-P20	Fluid geochemistry of the vicano-cimino hydrothermal reservoir (central Italy): implications for geothermal exploration	Daniele Cinti, Franco Tassi, Monia Procesi, Other	Daniele Cinti

2B. Seismic triggering of volcanic eruptions and related activities

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_2B-P1	Experimental simulation of the processes at volcano reservoirs triggered by earthquakes	Thomas R. Walter, Heiko Woith	Thomas R. Walter
July 21 Poster	1W_2B-P2	Effect of seismic oscillation on the bubble detachment from wall of magma chamber	Manami Araki, Atsushi Toramaru	Atsushi Toramaru
July 21 Poster	1W_2B-P3	Static and Quasistatic stress changes due to Tohoku megathrust earthquake: Effects on Japanese volcanoes	Eisuke Fujita, Tomofumi Kozono, Hideki Ueda, Other	Eisuke Fujita
July 21 Poster	1W_2B-P4	A large-scale block slide over a buried old caldera triggered by the 2011 March 11 M9 earthquake Japan: A case study for understanding of earthquake triggering mechanism of volcano flank collapse	Makoto Murakami, Satoshi Okuyama, Masato Furuya, Other	Makoto Murakami
July 21 Poster	1W_2B-P5	Tectonic earthquakes triggering volcanic activity? Preliminary study case: Central American Pacific coast, 2012.	Gino Gonzalez, Raul Mora-Amador, Carlos Ramirez, Other	Gino Gonzalez
July 21 Poster	1W_2B-P6	Shallow magmatic source inferred from seismic and deformation observation at Galunggung Volcano, West Java	Nia Haerani, Hetty Triastuty, Yudovan Vidyan, Other	Nia Haerani
July 21 Poster	1W_2B-P7	Preliminary research on mud volcanoes and earthquakes activity in the northern tianshan mountain, xinjiang	Qiong Wang	Qiong Wang
July 21 Poster	1W_2B-P8	Study of Seismic Activity at Ceboruco Volcano, Mexico	Francisco J Nunez-Cornu, Christian R Escudero, Carlos Suarez-Plascencia	Francisco J Nunez-Cornu

2F. Stress, strain, and mass changes at active volcanoes

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_2F-P1	Can seismicity rates recorded on a volcano be used as a stress gauge ?	Aurore L Carrier, Jean-Luc Got, David Marsan, Other	Aurore L Carrier
July 21 Poster	1W_2F-P2	Insights on the deep activity of Piton de la Fournaise Volcano from long-term seismic velocity changes	Diane Rivet, Florent Brenguier, Nikolai M Shapiro, Other	Diane Rivet
July 21 Poster	1W_2F-P3	Multi-disciplinary continuous monitoring of Kawah Ijen volcano, East Java, Indonesia	Corentin J.L. Caudron, Thomas Lecocq, Devy Kamil Syahbana, Other	Corentin J.L. Caudron
July 21 Poster	1W_2F-P4	Deformation in Agung volcano: a preliminary result from GPS measurements	Yasa Suparman, Umar Rosadi, Kris Tianto, Other	Yasa Suparman
July 21 Poster	1W_2F-P5	Interaction system between tectonic earthquakes and volcanic activity increase with Talang volcano (Indonesia) as area of study	Estu Kriswati, Hasanuddin Zainal Abidin, Irwan Meilano, Other	Estu Kriswati
July 21 Poster	1W_2F-P6	New insight into the microfracturing dynamics of Etna's edifice during the 1994-2001 period	Daniele Carbone, Marco Aloisi, Sergio Vinciguerra, Other	Giuseppe Puglisi
July 21 Poster	1W_2F-P7	Links between volcano seismicity and small-scale deformation of the volcanic edifice - exploring new ways of detecting small static deformations	Johannes Thun, Christopher J Bean, Ivan Lokmer	Johannes Thun
July 21 Poster	1W_2F-P8	Repeating volcano-tectonic earthquakes at Mt. Etna volcano (Sicily, Italy): characterization and evidences of crustal changes	Andrea Cannata, Salvatore Alparone, Andrea Ursino	Andrea Cannata
July 21 Poster	1W_2F-P9	Mt. Etna's flank instability, insights from rock deformation experiments.	Richard R Bakker, Philip M Benson, Sergio C Vinciguerra	Richard R Bakker

July 21 Poster	1W_2F-P10	Vertical ground deformation associated with the volcanic activity of Sakurajima volcano, Japan during 1996-2012 as revealed by repeated precise leveling surveys	Keigo Yamamoto, Takahiro Ohkura, Takeshi Matsushima, Other	Keigo Yamamoto
July 21 Poster	1W_2F-P11	Estimation of magma chamber related to the 2011 eruption of Shinmoedake volcano, Japan	Shiori Fujita, Takeshi Matsushima	Shiori Fujita
July 21 Poster	1W_2F-P12	Crustal deformation due to sub-Pulian eruption in Shinmoedake, Kirishima, Japan in 2011	Shigeru Nakao, Yuichi Morita, Kazuhiko Goto, Other	Shigeru Nakao
July 21 Poster	1W_2F-P13	Constraints on Deformation at the Summit area of Kuchinoerabujima Volcano in Japan from SAR Interferometry Time Series Analysis	Akiko Tanaka, Paul Lundgren	Akiko Tanaka
July 21 Poster	1W_2F-P14	Magma mass transport in the volcanic vent at Asama Volcano in the central Japan revealed by physical corrections of hydrological gravity disturbances	Takahito Kazama, Shuhei Okubo, Takayuki Sugano, Other	Takahito Kazama
July 21 Poster	1W_2F-P15	Movement of magma at depths within mt. asama, japan, revealed by ground deformation and volcanic gas studies	Ryunosuke Kazahaya, Hiroshi Shinohara, Yosuke Aoki, Other	Ryunosuke Kazahaya
July 21 Poster	1W_2F-P16	Ground deformation of Izu-Oshima volcano in magma accumulation period	Shin'ya Onizawa, Akimichi Takagi, Kazuya Kokubo, Other	Shin'ya Onizawa
July 21 Poster	1W_2F-P17	Crustal deformation of Miyakejima volcano, Japan since the eruption of 2000 using dense GPS campaign observation	Miyo Fukui, Takeshi Matsushima, Natsumi Yumitori, Other	Miyo Fukui
July 21 Poster	1W_2F-P18	Spatiotemporal strain distribution around Kussharo caldera, eastern Hokkaido, Japan, measured by GPS	Mako Ohzono, Hiroaki Takahashi	Mako Ohzono
July 21 Poster	1W_2F-P19	Widespread deflation at Cotopaxi Volcano, Ecuador	Patricia A Mothes, Gorki A. Ruiz P., Paul A. Jarrin T., Other	Patricia A Mothes
July 21 Poster	1W_2F-P20	Topographic and deformation source interaction effects on surface displacement modeling	Mehdi Nikkhoo, Thomas R. Walter, Valerio Acocella	Mehdi Nikkhoo
July 21 Poster	1W_2F-P21	Viscoelastic finite element models of an active magmatic intrusion at Uturuncu Volcano, Bolivia: Insights into vertical ascent through stratified continental crust	Scott T Henderson, Matt E Pritchard	Scott T Henderson
July 21 Poster	1W_2F-P22	InSAR data reveal superimposition of local flank instability and volcano-wide inflation at Lastarria volcano, Chile	Nicole Richter, Thomas R. Walter	Nicole Richter
July 21 Poster	1W_2F-P23	Enhanced sub-daily near real-time surface deformation analysis at Deception (South Shetland) and El Hierro (Canaries) Islands	Goncalo Prates, Manuel Berrocoso, Alberto Fernandez-Ros, Other	Ramon Ortiz
July 21 Poster	1W_2F-P24	Numerical modeling of deformation and stress fields around a magma chamber: constraints on failure conditions and rheology	Gilda Currenti, Charles A Williams	Charles A Williams
July 21 Poster	1W_2F-P25	Crustal Deformation at the Okataina Volcanic Centre, New Zealand using GPS measurements from 1998 to 2011	Lucas Holden, Nico Fournier, John Beavan, Other	Lucas Holden
July 21 Poster	1W_2F-P26	Temporal changes in seismic anisotropy near the times of the 2012 Tongariro Volcano eruptions, New Zealand	Holly J Godfrey, Adrian Shelley, Martha K Savage	Martha K Savage
July 21 Poster	1W_2F-P27	Automated Grading Analysis for Shear Wave Splitting	Ernestynne Walsh, Martha Savage, Richard Arnold, Other	Ernestynne Walsh
July 21 Poster	1W_2F-P28	Estimated pressure source and vertical deformation in Tatun volcano group, Taiwan, detected by precise leveling during 2006-2013	Masayuki Murase, Cheng-Hong Lin, Fumiaki Kimata, Other	Masayuki Murase
July 21 Poster	1W_2F-P29	Volcano ground deformation caused by surface sediment loading	Henry Odbert, Benoit Taisne, Joachim Gottsmann, Other	Henry Odbert
July 21 Poster	1W_2F-P30	Stress coupling between magmatic and hydrological systems during explosive eruptions	Karen Strehlow, Joachim H Gottsmann, Alison C Rust	Karen Strehlow
July 21 Poster	1W_2F-P31	An experimental study of the volcano-sagging to volcano-spreading transition	Sam Poppe, Eoghan Holohan, Matthieu Kervyn, Other	Audray Delcamp
July 21 Poster	1W_2F-P32	Coupled geodetic and volcano-tectonic precursors to eruptions	Christopher Kilburn, Andrew Bell, Richard Wall, Other	Christopher Kilburn
July 21 Poster	1W_2F-P33	Magma flow between summit and Pu'u 'Ō'ō at Kilauea Volcano, Hawai'i	Chiara P Montagna, Helge M Gonnermann	Chiara P Montagna
July 21 Poster	1W_2F-P34	Volcano-tectonic interactions captured by decade-long GPS monitoring in the Azores	Jun Okada, Freysteinn Sigmundsson, Benedikt G Ofeigsson, Other	Jun Okada

2H. Dynamics of volcanic processes

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_2H-P1	Structural role of Fe in a pantelleritic melt	Kai-Uwe Hess, Nikita Borovkov, Thomas Fehr, Other	Kai-Uwe Hess
July 21 Poster	1W_2H-P2	Biot number influence on the crust-magma thermal regime under the volcano: evidences from integrating petrology and numerical models	Francisco Pla, Antonio M Alvarez-Valero	Francisco Pla
July 21 Poster	1W_2H-P3	Effective parametric inversion of pre-eruptive ground deformation for hydrokinetic model of magma plumbing system	Soma Minami, Masato Iguchi, Hitoshi Mikada, Other	Soma Minami
July 21 Poster	1W_2H-P4	Magma database of large-scale volcanic eruptions in Japan during the last one hundred thousand years	Shingo Takeuchi, Kiyoshi Toshida, Daisuke Miura	Shingo Takeuchi
July 21 Poster	1W_2H-P5	Rheology of Crystal- and Bubble-bearing Magmas: insights into volcanic conduit dynamics	Mattia Pistone, Luca Caricchi, Peter Ulmer	Luca Caricchi

July 21 Poster	1W_2H-P6	How does crystal-rich magma erupt? A preliminary model for the rheology of three-phase suspensions	Jen Truby, Edward W Llewellyn, Richard J Brown, Other	Jen Truby
July 21 Poster	1W_2H-P7	Investigating the rheological controls on the explosive-effusive transition at Tungurahua volcano	Jonathan B Hanson, Yan Lavallée, Fabian Goldstein, Other	Jonathan B Hanson
July 21 Poster	1W_2H-P8	Crystal plasticity as a strain marker of the viscous-brittle transition in magmas	Jackie E. Kendrick, Yan Lavallee, Elisabetta Mariani, Other	Jackie E. Kendrick
July 21 Poster	1W_2H-P9	Effects of crystallization and bubble nucleation on the elastic properties of magmas	Barbara A Tripoli, Benoit Cordonnier, Peter Ulmer	Barbara A Tripoli
July 21 Poster	1W_2H-P10	Syn-eruptive oxidation of sulfides in the recent eruption products of the Sakurajima volcano	Keiko Matsumoto, Michihiko Nakamura, Daisuke Miki, Other	Keiko Matsumoto
July 21 Poster	1W_2H-P11	Outgassing: influence on speed of magma fragmentation	Dominique Richard, Bettina Scheu, Sebastian P Mueller, Other	Bettina Scheu
July 21 Poster	1W_2H-P12	Temporal cycles in glass composition within volcanic ash from Showa Crater, Sakurajima volcano, southern Kyushu, Japan	Masayuki Sakakibara, Ryohei Uenosono, Sayaka Takakura	Masayuki Sakakibara
July 21 Poster	1W_2H-P13	Syn-Plinian vigorous lava fountain in andesitic volcanoes: Case study of the Sakurajima 1914 and 1779 eruptions and the Asama 1783 eruption, Japan	Maya Yasui	Maya Yasui
July 21 Poster	1W_2H-P14	Repose periods in cyclic Vulcanian activity: Textures and timescales of shallow magma densification	Fabian B Wadsworth, Bettina Scheu, Ben Kennedy, Other	Fabian B Wadsworth
July 21 Poster	1W_2H-P15	Frictional control on spine growth at Mt. Unzen, Japan	Adrian J Hornby, Jackie E Kendrick, Takehiro Hirose, Other	Adrian J Hornby
July 21 Poster	1W_2H-P16	Cristobalite in volcanic domes: crystallisation of a meta-stable mineral	David E Damby, Claire J Howell, Edward W Llewellyn, Other	David E Damby
July 21 Poster	1W_2H-P17	Rheology of crystallizing lava: an experimental approach	Oryaella Magdalena Chevrel, Corrado Cimarelli, Lea deBiasi, Other	Oryaella Magdalena Chevrel
July 21 Poster	1W_2H-P18	Investigating the collapse and inflation of erupting lava domes	Paul A Ashwell, Matthew Edwards, Ben M Kennedy, Other	Paul A Ashwell
July 21 Poster	1W_2H-P19	Interaction between rhyolitic lava flow and unconsolidated sediments, the Membo volcano, Kozushima Island, Japan: an implication for silicic phreatomagmatism	Toru Ishikawa	Toru Ishikawa
July 21 Poster	1W_2H-P20	The role of confining pressure in submarine silicic effusive eruptions	Rebecca J Carey, Sharon Allen, Jocelyn McPhie	Rebecca J Carey

2K. Experimental volcanology

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_2K-P1	Rheology of bubble- and crystal-bearing magma: an analogue dataset	Sebastian P Mueller, Ed W Llewellyn, Heidi M Mader	Sebastian P Mueller
July 21 Poster	1W_2K-P2	Experimental investigations on rheology and microstructure of the 1946 andesitic lava from Sakurajima volcano, Japan	Hidemi Ishibashi, Takahiro Miwa, Takehiko Hiraga	Hidemi Ishibashi
July 21 Poster	1W_2K-P3	Viscosity measurements of crystal-bearing natural lava samples from Unzen volcano, Japan	Akio Goto, Takehiko Hiraga, Hidemi Ishibashi	Akio Goto
July 21 Poster	1W_2K-P4	Deformation and failure of single- and multi-phase silicate liquids: seismic precursors and mechanical work	Jeremie Vasseur, Yan Lavallée, Fabian Wadsworth, Other	Jeremie Vasseur
July 21 Poster	1W_2K-P5	In situ observation of brittle fracturing of rhyolite magma by X-ray radiography	Satoshi Okumura, Michihiko Nakamura, Kentaro Uesugi	Satoshi Okumura
July 21 Poster	1W_2K-P6	Fluid flow and degassing in high temperature magma	Helen E Gaunt, Peter R Sammonds, Philip G Meredith, Other	Helen E Gaunt
July 21 Poster	1W_2K-P7	Experimental study of liquefaction and fluid transport: implication for triggered eruptions	Nao Yasuda, Ikuro Sumita	Nao Yasuda
July 21 Poster	1W_2K-P8	Flowers, snowflakes and crystalline magmas - insight into gas migration regimes in crystalline viscous melts	Julie Oppenheimer, Katharine V Cashman, Alison C Rust, Other	Julie Oppenheimer
July 21 Poster	1W_2K-P9	Intermittent and efficient outgassing by upward propagation of film ruptures	Atsuko Namiki, Takanori Kagoshima	Atsuko Namiki
July 21 Poster	1W_2K-P10	Buoyant bubble rise through concentrated particulate suspensions with potential application to crystallizing magmas	Pranabendu Moitra, Helge M Gonnermann	Pranabendu Moitra
July 21 Poster	1W_2K-P11	Nucleation and growth of bubbles using smooth interface models	Thierry Biben, Samy Merabia, Julien Lombard	Thierry Biben
July 21 Poster	1W_2K-P12	Experimental model of a volcanic conduit: Acoustic and seismic signals associated with an overpressure release	Valérie Vidal, Brayan Álvarez, Claudia Sánchez, Other	Valérie Vidal
July 21 Poster	1W_2K-P13	Influence of decompression path in the shallow conduit on eruption dynamics: first insights from laboratory experiments	Laura Spina, Bettina Scheu, Corrado Cimarelli, Other	Laura Spina
July 21 Poster	1W_2K-P14	Why does Fuji volcano release only basalt? Experimental study of deep magma chamber	Kenta Asano, Eiichi Takahashi, Morihisa Hamada, Other	Kenta Asano
July 21 Poster	1W_2K-P15	Analogue study of bomb sag formation: effects of substrate properties and impact velocity	Michael Manga, Ameeta Patel, Brent Delbridge, Other	Michael Manga

3D. Evolution of eruptive craters, vents and conduits from feeding dikes, sills, and magma chambers

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_3D-P1	Insights on a new pattern of dyke propagation in volcanic edifices	Claudia Corazzato, Alessandro Tibaldi, Fabio Luca Bonali, Other	Fabio Luca Bonali
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July 21 Poster	1W_3D-P2	The tertiary volcanic sub-marine formation of kuta-beach, lombok, indonesia, a geological and educational site of high patrimonial value	Indyo Pratomo, Patrick Wassmer, Sam Permanadewi	Indyo Pratomo
July 21 Poster	1W_3D-P3	Finite element analysis of conduit wall rock stresses associated with steady flow models	Jonathan B Hanson, Alison C Rust, Martyn J Pavier, Other	Jonathan B Hanson
July 21 Poster	1W_3D-P4	From dike to plug: critical physical transitions in the evolution of sustainable basaltic volcanism	Meredith R Townsend, David D Pollard	Meredith R Townsend
July 21 Poster	1W_3D-P5	Structure of phreatomagmatic crater rows from gravity surveying. Conduit shape comparisons between the fissures of the 871 AD Vatnaöldur and 1477 AD Veidivotn eruptions, south central Iceland	Jeanne M. Giniaux, Magnus Tumi Gudmundsson, Gudrun Larsen, Other	Jeanne M. Giniaux
July 21 Poster	1W_3D-P6	Eruption of crystal-rich basalts following a large sector collapse: Evidence from IODP cores sampled offshore Montserrat	Michael Cassidy, Sebastian F.L Watt, Peter Talling, Other	Michael Cassidy
July 21 Poster	1W_3D-P7	Evolution of the phreatomagmatic Cova de Paul eruption, Santo Antao, Cape Verde Islands: links between the development of the eruption and the growth of the crater.	Robert W Tarff, Simon J Day	Simon J Day
July 21 Poster	1W_3D-P8	Dolerite sill body inferred from bore hole investigation in the Yufutsu Oil and Gas Field, Hokkaido, North Japan	Satoshi Okamura, Sakura Onodera, Takahiro Torigoe	Takahiro Torigoe
July 21 Poster	1W_3D-P9	2012 Copahue volcano eruption (Argentina)	Alberto T Caselli, Mariano R Agosto, Maria L Velez, Other	Alberto T Caselli
July 21 Poster	1W_3D-P10	Petrographic characterization of material ejected during eruptive phases of Copahue volcano (Argentina) in 2012	Alberto T Caselli, Romina Daga, Juan M Albite, Other	Alberto T Caselli
July 21 Poster	1W_3D-P11	Eruptive history of long-lived active Tokachidake volcano group, southwestern Kurile arc	Yoshihiro Ishizuka, Mitsuhiro Nakagawa	Yoshihiro Ishizuka

3H. Lava flows

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_3H-P1	Petrological characteristics of Takayubaru lava flow extruded immediately before the catastrophic Aso-4 pyroclastic eruption in central Kyushu, Japan	Kiyoshi Kurokawa, Toshiaki Hasenaka, Yasushi Mori	Kiyoshi Kurokawa
July 21 Poster	1W_3H-P2	Petrological characteristics of Miocene basalts from Ootsu district, back-arc area of SW Japan arc	Yoji Higashiyama, Takashi Nagao, Toshiaki Hasenaka	Yoji Higashiyama
July 21 Poster	1W_3H-P3	Petrological comparison between the earliest product of Aso-4 pyroclastic flow and its precursory lava extrusion, in central Kyushu, Japan.	Hideto Yamasaki, Toshiaki Hasenaka, Yasushi Mori	Hideto Yamasaki
July 21 Poster	1W_3H-P4	The evolution of the dimensions and morphology of lava flows from a volcano: A case study on the Lonquimay Volcanic Complex, Southern Andes of Chile	Rayen Gho, Angelo Castruccio	Angelo Castruccio
July 21 Poster	1W_3H-P5	Emplacement processes of off-axis large submarine lava field in the Oman Ophiolite	Susumu Umino, Yuki Kusano, Kyoko Kanayama, Other	Susumu Umino
July 21 Poster	1W_3H-P6	Reconstructing lava flow emplacement process at the hotspot-affected Galapagos Spreading Center, 92 and 95W	Tim McClinton, Scott M White, Alice Colman, Other	Tim McClinton
July 21 Poster	1W_3H-P7	Reconstruction of paleo-volcanoes in the back-arc region of northeast Japan that formed during the opening phase of the Japan Sea	Jun Hosoi, Kazuo Amano	Kazuo Amano
July 21 Poster	1W_3H-P8	Soufrière Hills Volcano, Montserrat, Phase V 2009-10: Interpretation of thermal imagery of the lava dome	Marc Bernstein, Eliza Calder, Paul Cole, Other	Marc Bernstein

3J. Carbon dioxide emission from volcanoes and tectonically active regions

Poster Presentation July 21 Core Time (13:30-15:00)

July 21 Poster	1W_3J-P1	The first record of a high time resolution carbon dioxide flux for the North-East Crater of Mount Etna	Tom D. Pering, Giancarlo Tamburello, Alessandro Aiuppa, Other	Tom D. Pering
July 21 Poster	1W_3J-P2	Recent (2006-2013) unrest at Mammoth Mountain, California and the evolving role of magmatic CO ₂	Jennifer L Lewicki, Deborah Bergfeld, William C Evans, Other	Jennifer L Lewicki
July 21 Poster	1W_3J-P3	Hydrogeochemical fluctuations related to Popocatepetl activity during the last decade: relevance of spring water monitoring to hazard assessment	Maria Aurora Armienta, Servando De La Cruz-Reyna, Olivia Cruz, Other	Maria Aurora Armienta
July 21 Poster	1W_3J-P4	Monitoring of CO ₂ soil diffuse degassing at Izu-Oshima volcano, Japan	Pedro A Hernandez, Toshiya Mori, Kenji Notsu, Other	Pedro A Hernandez
July 21 Poster	1W_3J-P5	Diffuse CO ₂ measurements in Taal Volcano Main Crater from 2008-2012 and record of possible magmatic intrusion event in 2010-2011	Maria Carmencita B Arpa, Pedro A Hernandez, Paolo Reniva, Other	Maria Carmencita B Arpa
July 21 Poster	1W_3J-P6	Volcanic flank soil degassing of carbon dioxide at Gede volcano (West Java, Indonesia)	Syegi L. Kunrat, Florian M. Schwandner	Syegi L. Kunrat
July 21 Poster	1W_3J-P7	CO ₂ and heat fluxes in central Apennine, Italy	Giovanni Chiodini, Carlo Cardellini, Stefano Caliro, Other	Giovanni Chiodini
July 21 Poster	1W_3J-P8	Interactions between magmatic degassing and regional tectonic revealed through stable carbon isotopes, Long Valley Caldera, California	Gregor Lucic, John Stix	Gregor Lucic
July 21 Poster	1W_3J-P9	Periodic gas release from the LUSI mud volcano (East Java, Indonesia)	Loyc Vanderkluisen, Michael R. Burton, Amanda B. Clarke, Other	Loyc Vanderkluisen
July 21 Poster	1W_3J-P10	A reconnaissance survey of the CO ₂ soil fluxes in the Michoacan Guanajuato Monogenetic Volcanic Field	Mariana Patricia Jacome Paz, Hugo Delgado Granados, Ramon Espinasa-Pereña	Hugo Delgado Granados

July 21 Poster	1W_3J-P11	Diffuse CO ₂ and H ₂ S degassing from the summit crater of Pico do Fogo	Samara M. Dionis, Gladys V. Melian, Eleazar Padron, Other	Samara M. Dionis
July 21 Poster	1W_3J-P12	Diffuse CO ₂ and He Emission From Sao Miguel Volcanic Systems, Azores.	Inigo Hernández Martin, Gladys Melian, Dacil Nolasco, Other	Inigo Hernández Martin
July 21 Poster	1W_3J-P13	Diffuse CO ₂ And 222Rn Degassing From Faial Volcano System, Azores	Dacil Nolasco, Nemesio Perez, Maria Dolores Peraza, Other	Dacil Nolasco
4A. Forecasting the weather and climate effects of volcanic eruptions Poster Presentation July 21 Core Time (13:30-15:00)				
July 21 Poster	1W_4A-P1	Climate forcing by very large basaltic eruptions - Insight from oxygen isotopes of biogenic silica from the finely laminated diatomite of the Fur Formation, Denmark	Johan H. Schmith, Paul M. Holm	Johan H. Schmith
July 21 Poster	1W_4A-P2	Climate and carbon cycle response to the 1815 Tambora volcanic eruption	Jessica Kandlbauer, Peter O Hopcroft, R Stephen J Sparks, Other	Jessica Kandlbauer
July 21 Poster	1W_4A-P3	Sulphur yield and climatic impact of the AD 1835 eruption of Cosigüina volcano, Nicaragua	Marc-Antoine Longpré, John Stix	Marc-Antoine Longpré
July 21 Poster	1W_4A-P4	Volcanic and anthropogenic contributions to stratospheric aerosol changes from 2000 to 2009	Thomas Diehl, Mian Chin, Nickolay Krotkov, Other	Thomas Diehl
4E. Testing eruption forecast and open issues Poster Presentation July 21 Core Time (13:30-15:00)				
July 21 Poster	1W_4E-P1	Tornillos modeled as self-oscillations of fluid filling a cavity: implications for the 1992-1993 activity at Galeras volcano, Colombia	Kostas I. Konstantinou	Kostas I. Konstantinou
July 21 Poster	1W_4E-P2	Testing the performance limits of eruption forecasting models using synthetic precursory data	Andrew F Bell, Mark Naylor, Ian G Main	Andrew F Bell
July 21 Poster	1W_4E-P3	The challenge in quantifying magma input and output to active volcanoes—an example from Kilauea	Michael P. Poland, A. Jeff Sutton, Tim R. Orr	Michael P. Poland
4F. Responding to volcanic health hazards and volcanic ash impacts, mitigation and warning Poster Presentation July 21 Core Time (13:30-15:00)				
July 21 Poster	1W_4F-P1	Volcanic health hazard: the acidification of seawater and trace metals accumulation study in Blue Mussels (<i>Mytilus galloprovincialis</i>). Vulcano Island (Italy)	Fulvio Boatta, Walter D'Alessandro, Antonina L. Gagliano, Other	Walter D'Alessandro
July 21 Poster	1W_4F-P2	New results and review of major and trace element output from worldwide passive degassing volcanoes	Sergio Calabrese, Sarah Scaglione, Walter D'Alessandro, Other	Walter D'Alessandro
July 21 Poster	1W_4F-P3	Groundbased in-situ particle measurements in the nearfield of Grimsvoetn volcano, Iceland 2011	Andreas Vogel, Konradin Weber, Christian Fischer, Other	Andreas Vogel
July 21 Poster	1W_4F-P4	Volcanic ash hazard assessment In West Java, Indonesia using FALL3D computational model	Mochamad Nugraha Kartadinata, Adele Bear Crozier, Ole Nielsen, Other	Mochamad Nugraha Kartadinata
July 21 Poster	1W_4F-P5	Using MODIS images for the monitoring of volcanic clouds of Mexican volcanoes (Volcan de Colima and Popocatepetl)	Jose Carlos Jimenez-Escalona, Hugo Delgado-Granados	Hugo Delgado-Granados
July 21 Poster	1W_4F-P6	Automatic program of the detection of ash plume and estimation its height using local seismicity	Vitaly Bliznetsov, Sergey Senyukov	Vitaly Bliznetsov
July 21 Poster	1W_4F-P7	Effects of SO ₂ on the respiratory system in Miyakejima residents seven years after returning to the island	Satoko Iwasawa, Tazuru Tsuboi, Takeshi Kochi, Other	Satoko Iwasawa
July 21 Poster	1W_4F-P8	The present state of Miyakejima SO ₂ Gas Emissions and its Influence to Local Communities	Yasuhiro Ishimine, Chihiro Kitahara, Yoshinari Hayashi	Yasuhiro Ishimine
July 21 Poster	1W_4F-P9	Clinical influences of an inhalation of volcanic ash from the massive eruption of Mt. Shinmoedake in patients with obstructive lung disease	Yasuji Arimura, Akihiro Sakamoto, Chikara Fukuyama, Other	Yasuji Arimura
July 21 Poster	1W_4F-P10	Observations by the JMA weather radar network and quantitative predictions of tephra-fall with the JMA RATM for the eruptions at Shinmoe-dake volcano in 2011	Toshiki Shimbori, Akihiro Hashimoto, Shin'ya Onizawa, Other	Keiichi Fukui
July 21 Poster	1W_4F-P11	Numerical Simulation of Transport and Sedimentation of Volcanic Ash for the Eruptions at Mt. Shinmoe-dake during 26-27 January 2011	Akihiro Hashimoto, Toshiki Shimbori, Keiichi Fukui, Other	Akihiro Hashimoto
July 21 Poster	1W_4F-P12	Medical Preparedness for Next Large Eruptions of Sakurajima Volcano	Yasuhiro Ishimine	Yasuhiro Ishimine
July 21 Poster	1W_4F-P13	Volcanic Ash Fall Forecasts of Japan Meteorological Agency and its improvement	Yoshihiko Hasegawa, Akira Sugai, Yosuke Hayashi, Other	Yoshihiko Hasegawa
July 21 Poster	1W_4F-P14	Environmental impact of acid river neutralization system in the Kusatsu hot spring area, Gunma, Japan	Yoshikazu Kikawada	Yoshikazu Kikawada

PROGRAM

July 23, AM

Date/Time	No.	Title	Authors	Presenter
2A. Volcanic tremor, seismic events and volcanic conduit dynamics: understanding based on field observations, experiments, and modeling Oral Presentation July 23 AM1 (8:45-10:30) Room A1 Chair: Hiroyuki Kumagai, Dannie Hidayat				
July 23 8:45-9:00	3A1_2A-O1	Modeling of Topographic Effects of Seismic Wave Propagation Around Sakurajima Volcano, Japan	Akira Fujioka, Hiroshi Takenaka, Takeshi Nakamura, Other	Akira Fujioka

July 23 9:00-9:15	3A1_2A-O2	Source amplitudes of volcano-seismic signals determined by the amplitude source location method as a quantitative measure of event size	Hiroyuki Kumagai, Rudy Lacson Jr., Yuta Maeda, Other	Hiroyuki Kumagai
July 23 9:15-9:30	3A1_2A-O3	Observation of Seismicity and Eruptive Activity at Semeru Volcano, East Java, Indonesia	Sukir Maryanto, Didik Rahadi Santoso, Adi Susilo, Other	Sukir Maryanto
July 23 9:30-9:45	3A1_2A-O4	Tectonics or magma intrusion? -- New results from the analyses of seismic swarms at Gede Volcano and Salak Volcano, West Java, Indonesia	Dannie Hidayat, Hendra Gunawan, Muhammad Hendrasto, Other	Dannie Hidayat
July 23 9:45-10:00	3A1_2A-O5	Repetitive hybrid earthquakes at regular intervals as a precursor of the 6 August 2012 eruption of Tongariro volcano, New Zealand.	Tony Hurst, Arthur D Jolly, Steve Sherburn	Tony Hurst
July 23 10:00-10:15	3A1_2A-O6	Automatic classification of seismo-volcanic signals as a tool to improve eruption forecasting	Anais Boue, Philippe Lesage, Guillermo Cortes, Other	Anais Boue
July 23 10:15-10:30	3A1_2A-O7	Listening to Ambrym volcano (Vanuatu), by a triangular acoustic network: a precursor to a Strombolian episode	Sylvie Vergnolle, Christelle Zielinski, Philipson Bani, Other	Sylvie Vergnolle

2A. Volcanic tremor, seismic events and volcanic conduit dynamics: understanding based on field observations, experiments, and modeling

Oral Presentation July 23 AM2 (10:45-12:30) Room A1

Chair: Jurgen Neuberg, Gregory Waite

July 23 10:45-11:00	3A2_2A-O8 Invited	Shallow and deep triggering of Plinian-type eruptions inferred from acoustic and seismic eruption tremors	Mie Ichihara, Minoru Takeo, Yuki Maehara, Other	Mie Ichihara
July 23 11:00-11:15	3A2_2A-O9 Invited	Calibrating volcanoes: Advances through a combination of scaled experiments and monitoring tools	Ulrich Kueppers, Miguel A Alatorre-Ibarguengoitia, Alejandra Arciniega, Other	Ulrich Kueppers
July 23 11:15-11:30	3A2_2A-O10	Model space exploration for determining landslide source history from long period seismic data	Juan Zhao, Anne Mangeney, Eleonore Stutzmann, Other	Anne Mangeney
July 23 11:30-11:45	3A2_2A-O11	Seismic records of rockfalls associated with volcanic activity (Soufrière Hills volcano, Montserrat)	Anne Mangeney, Clara Levy, Clément Hibert, Other	Anne Mangeney
July 23 11:45-12:00	3A2_2A-O12	On the use of seismic broadband sensors in volcanic settings	Jurgen W Neuberg, Paddy J Smith	Jurgen W Neuberg
July 23 12:00-12:15	3A2_2A-O13	Joint inversion of ULP tilt and VLP displacement from small explosions at Fuego volcano	Gregory P Waite, Kyle A Brill	Gregory P Waite
July 23 12:15-12:30	3A2_2A-O14	Ground Deformation Cycles in a Magma-effusive Stage, Sub-Plinian and Vulcanian Eruptions at Kirishima Volcanoes, Japan	Minoru Takeo, Yuki Maehara, Mie Ichihara, Other	Minoru Takeo

3A. Ocean island volcanoes and large igneous province

Oral Presentation July 23 AM1 (8:45-10:30) Room A2

Chair: Loyc Vanderkluyssen, Millard F. Coffin, Maria Luisa G. Tejada

July 23 8:45-9:00	3A1_3A-O1 Invited	Tales of Two LIPs: Kerguelen/Broken Ridge (Indian Ocean) and Ontong Java (Pacific Ocean)	Millard F Coffin	Millard F Coffin
July 23 9:00-9:15	3A1_3A-O2 Invited	Crustal structure of the Ontong Java Plateau revealed from seismic surveys	Seiichi Miura, Millard F Coffin, Shuichi Kodaira	Seiichi Miura
July 23 9:15-9:30	3A1_3A-O3	Post-emplacement alkalic volcanism on the Ontong Java Plateau revisited: Insights from Lyra Basin basalts	Maria Luisa G Tejada, Kenji Shimizu, Katsuhiko Suzuki, Other	Maria Luisa G Tejada
July 23 9:30-9:45	3A1_3A-O4	Lithium isotope evidence for direct assimilation of hydrothermal fluid to magma beneath oceanic large igneous provinces	Takashi Sano, Yoshiro Nishio	Takashi Sano
July 23 9:45-10:00	3A1_3A-O5	Self-limiting chemistry, aerosol and climate effects of large-scale flood basalt eruptions	Thorvaldur Thordarson, Anja Schmidt, Marjorie Wilson, Other	Thorvaldur Thordarson
July 23 10:00-10:15	3A1_3A-O6	Understanding geochemical diversity of CFBs: rift and rift-shoulder magmas in the Jurassic Karoo-Ferrar province	Arto V Luttinen, Jussi S Heinonen	Arto V Luttinen
July 23 10:15-10:30	3A1_3A-O7	Recycled material in magma sources of Shatsky Rise; noble gas evidence	Takeshi Hanyu, Kenji Shimizu, Takashi Sano	Takeshi Hanyu

3A. Ocean island volcanoes and large igneous province

Oral Presentation July 23 AM2 (10:45-12:30) Room A2

Chair: Loyc Vanderkluyssen, Millard F. Coffin, Maria Luisa G. Tejada

July 23 10:45-11:00	3A2_3A-O8	Different styles of magma replenishment at Sierra Negra Volcano, Galapagos	Dennis Geist, William Chadwick, Jr.	Dennis Geist
July 23 11:00-11:15	3A2_3A-O9 Invited	Growth and evolution of the western Galápagos volcanoes: insights from space-geodetic observations.	Marco Bagnardi, Falk Amelung	Marco Bagnardi
July 23 11:15-11:30	3A2_3A-O10	Magma injection process in monogenetic volcanoes: the El Hierro eruption, Canary Island, Spain: applications to eruption forecasting	Alicia Garcia, Jose M Marrero, Manuel Berrocoso, Other	Servando de la Cruz-Reyna
July 23 11:30-11:45	3A2_3A-O11	A multidisciplinary approach to the understanding of the magmatic and volcanic history of Heard Island, Kerguelen Plateau.	Jodi M Fox, Graeme E Wheller, Millard F Coffin, Other	Jodi M Fox
July 23 11:45-12:00	3A2_3A-O12	Geochemistry and eruption depths of volcanic glasses from the Louisville seamounts	Alexander RL Nichols, Christoph Beier, Philipp A Brandl	Alexander RL Nichols
July 23 12:00-12:15	3A2_3A-O13	Dynamics of Kilauea's magmatic system imaged using a joint analysis of geodetic and seismic data	Christelle Wauthier, Diana Roman, Michael Poland, Other	Christelle Wauthier
July 23 12:15-12:30	3A2_3A-O14 Invited	Petrology and geochemical evolution of lavas from the ongoing and voluminous Puu Oo eruption of Kilauea Volcano, Hawaii	Michael O Garcia, Aaron Pietruszka, Andrew Greene, Other	Michael O Garcia

3F. The complexity and diversity of pyroclastic fall out deposits Oral Presentation July 23 AM1 (8:45-10:30) Room A3 Chair: Ray Cas, Laura Pioli				
July 23 8:45-9:00	3A1_3F-O1	The complexity and diversity of pyroclastic fallout forming eruptions and deposits: how do we study and classify them?	Raymond A.F. Cas, Katherine Cashman, Guido Giordano, Other	Raymond A.F. Cas
July 23 9:00-9:30	3A1_3F-O2 Invited	Explosive volcanic eruptions: from observations to quantification	Costanza Bonadonna	Costanza Bonadonna
July 23 9:30-9:45	3A1_3F-O3	From field data to volumes: constraining uncertainty for pyroclastic eruptions	Malin Klawonn, Bruce F Houghton, Donald A Swanson, Other	Bruce F Houghton
July 23 9:45-10:00	3A1_3F-O4	Emplacement of complex fall deposits from heterogeneous magmatic systems: the bimodal Cuicuitic member at Los Humeros caldera, Mexico	Pablo Davila-Harris, Gerardo Carrasco-Nunez	Gerardo Carrasco-Nunez
July 23 10:00-10:15	3A1_3F-O5	Stratigraphy and eruptive dynamics of the 2011 Cordon Caulle eruption, Chile	Manuela Elisondo, Valerie Baumann, Costanza Bonadonna, Other	Raffaello Cioni
July 23 10:15-10:30	3A1_3F-O6	Reconstruction of eruption dynamics and conduit evolution from granulometry, componentry, and accessory lithic clast morphology: the 2360 BP eruption of Mount Meager	Michelle E. Campbell, Lucy Porritt, Kelly Russell	Michelle E. Campbell
3F. The complexity and diversity of pyroclastic fall out deposits Oral Presentation July 23 AM2 (10:45-12:30) Room A3 Chair: Laura Pioli, Kathy Cashman				
July 23 10:45-11:15	3A2_3F-O7 Invited	Reconstruction of volcanic plume dynamics and fallout deposits on the basis of numerical simulations	Yujiro J. Suzuki, Takehiro Koyaguchi	Yujiro J. Suzuki
July 23 11:15-11:30	3A2_3F-O8	The application of statistical methods in determining volcanic eruption parameters from tephra fall deposits	Rose E Burden, Li Chen, Jeremy C Phillips, Other	Jeremy C Phillips
July 23 11:30-11:45	3A2_3F-O9	Which part of the eruption cloud does volcanic ash fall from? An inversion analysis of the 1986B Izu-Oshima eruption	Kazutaka Mannen, Charles B Connor	Kazutaka Mannen
July 23 11:45-12:00	3A2_3F-O10	Inception of mafic, explosive caldera-forming eruptions: the basal fallout deposits of the "villa venni" (355 ka) and "pozzolane nere" (407 ka) eruptions at "colli albani" volcano (italy)	Guido Giordano, Silvia Campagnola, Annapaula Vinkler, Other	Guido Giordano
July 23 12:00-12:15	3A2_3F-O11	Tephra in Argentina establishes postglacial eruptive history of Laguna del Maule volcanic field in Chile	Judy Fierstein, Patricia Sruga, Alvaro Amigo, Other	Judy Fierstein
July 23 12:15-12:30	3A2_3F-O12	Stratigraphic variation in characteristics of pyroclastic deposits in the 2011 subplinian eruptions of Shinmoedake volcano	Yu Iriyama, Atsushi Toramaru, Tetsuo Yamamoto	Yu Iriyama
3K. Volcano-ice interaction and planetary volcanism Oral Presentation July 23 AM1 (8:45-10:30) Room A4 Chair: Hugh Tuffen, Alison Graettinger				
July 23 8:45-9:00	3A1_3K-O1 Invited	Pyroclastic passage zones in glaciovolcanic sequences	Kelly Russell, Ben Edwards, Lucy Porritt	Lucy Porritt
July 23 9:00-9:15	3A1_3K-O2	A model for recent magmatism on Mars	Kei Kurita, Sohei Ohmori, Rina Noguchi, Other	Kei Kurita
July 23 9:15-9:30	3A1_3K-O3	Thermal, geological and glaciological constraints on past volcano-ice interactions	Magnus T Gudmundsson, Alexander H Jarosch, Carolyn Gorny, Other	Magnus T Gudmundsson
July 23 9:30-9:45	3A1_3K-O4	Overview of recent findings regarding the fumarolic ice caves of Erebus volcano, Antarctica	Aaron G Curtis, Philip Kyle, Tobias Fischer, Other	Aaron G Curtis
July 23 9:45-10:00	3A1_3K-O5	Frozen martian lahars? Evidence from Utopia-Elysium flows	Gro B.M. Pedersen	Gro B.M. Pedersen
July 23 10:00-10:15	3A1_3K-O6	The style and characteristics of young magmatism on Mars	Rina Noguchi, Kei Kurita	Rina Noguchi
July 23 10:15-10:30	3A1_3K-O7	A new detailed glacio-eruptive history for Tongariro National Park, New Zealand: Results from mapping, geochronology, geochemistry and glaciology currently underway	Graham S Leonard, Dougal B Townsend, Chris Conway, Other	Graham S Leonard
3K. Volcano-ice interaction and planetary volcanism Oral Presentation July 23 AM2 (10:45-12:30) Room A4 Chair: Hugh Tuffen, Alison Graettinger				
July 23 10:45-11:00	3A2_3K-O8	Widespread lava-water interactions in Elysium Plantia, Mars: Implications for paleoenvironments during the Middle to Late Amazonian Epochs	Christopher W Hamilton	Christopher W Hamilton
July 23 11:00-11:15	3A2_3K-O9	Lava lake volcanism on Io: Insights from Erta Ale observations	Jani Radebaugh, Rosaly M. C. Lopes, Ralph D. Lorenz	Jani Radebaugh
July 23 11:15-11:30	3A2_3K-O10	The role of volatiles in volcanism on Io	Robert R Howell, Rosaly M C Lopes, Claire E Landis, Other	Robert R Howell
July 23 11:30-11:45	3A2_3K-O11	Morphometric extraction of the passage zone: Broad scale analysis of subglacial edifices in Iceland	Gro B. M. Pedersen, Pablo Grosse	Gro B. M. Pedersen
July 23 11:45-12:00	3A2_3K-O12	Rapid growth of a basaltic volcano beneath an ice sheet: Askja, Iceland	DW McGarvie, IP Skilling, AH Graettinger, Other	DW McGarvie
July 23 12:00-12:15	3A2_3K-O13	Suppression of lateral collapses at glaciated volcanoes in the South Sandwich arc by high rates of erosion and formation of sediment wave fields on the lower slopes of edifices.	Simon J Day, Matthew J Owen, Philip T Leat, Other	Simon J Day

July 23 12:15-12:30	3A2_3K-O14	Are Mars volcanic rocks dominated by primary melts and why?	David Baratoux, Magdalena O. Chevrel, Mickaël J. Toplis, Other	David Baratoux
3C. Caldera				
Oral Presentation July 23 AM1 (8:45-10:30) Room A5				
Chair: Valerio Acocella, Joachim Gottsmann, John Stix				
July 23 8:45-9:00	3A1_3C-O1 Invited	A thermomechanical perspective on caldera formation and classification	Shanaka L de Silva, Patricia M Gregg	Shanaka L de Silva
July 23 9:00-9:15	3A1_3C-O2 Invited	Fail or not to fail? Reservoir mechanics and ground deformation before large magnitude eruptions of intermediate magmas	Joachim H Gottsmann, Karen Strehlow	Joachim H Gottsmann
July 23 9:15-9:30	3A1_3C-O3	Thermal-mechanical models of magma chamber pressurization: Implications for chamber growth and caldera formation	Patricia M Gregg, Shanaka L de Silva, Eric B Grosfils	Patricia M Gregg
July 23 9:30-9:45	3A1_3C-O4	Caldera development during explosive eruptions	John Stix	John Stix
July 23 9:45-10:00	3A1_3C-O5	Analogue caldera collapse models characterized with radiography and computerized X-ray micro-tomography	Sam Poppe, Eoghan P. Holohan, Matthieu N. Boone, Other	Sam Poppe
July 23 10:00-10:15	3A1_3C-O6	Coupled long- and short-term eruption precursors during caldera unrest	Robert M Robertson	Robert M Robertson
July 23 10:15-10:30	3A1_3C-O7	Growth and rupture of the Minoan magma body, Santorini	Timothy H Druitt	Timothy H Druitt
3C. Caldera				
Oral Presentation July 23 AM2 (10:45-12:30) Room A5				
Chair: Nobuo Geshi, Joan Marti, Ben Kennedy				
July 23 10:45-11:00	3A2_3C-O8 Invited	The other side of caldera unrest: why do caldera subside?	Micol Todesco, Francesca Quarenì, Antonio Costa	Micol Todesco
July 23 11:00-11:15	3A2_3C-O9 Invited	Caldera resurgence during magma replenishment and rejuvenation at Valles and Lake City calderas	Ben M Kennedy, John Stix, Jack Wilcock	Ben M Kennedy
July 23 11:15-11:30	3A2_3C-O10	Caldera unrest at Taupo Volcano, New Zealand: intensity, impacts and mitigation	Sally H Potter, Gill E Jolly, Vince E Neall, Other	Sally H Potter
July 23 11:30-11:45	3A2_3C-O11	The Oskjuvatn caldera North Iceland revealed by detailed bathymetric study	Armann Hoskuldsson, Thor Thordarson	Armann Hoskuldsson
July 23 11:45-12:00	3A2_3C-O12	Investigating the state of the reservoir below the Rabaul caldera (Papua New Guinea)	Caroline Bouvet de Maisonneuve, Fidel Costa, Christian Huber, Other	Caroline Bouvet de Maisonneuve
July 23 12:00-12:15	3A2_3C-O13	Magmatic-tectonic triggers leading to the eruption of multiple isolated magma batches and twin caldera collapse in the Taupo Volcanic Zone, New Zealand	Florence Begue, Darren M Gravley, Chad D Deering, Other	Florence Begue
July 23 12:15-12:30	3A2_3C-O14	First recorded eruption of Nabro volcano, Eritrea, 2011	Berhe Goitom, Ghebrebrhan Ogubazghi, Jon Blundy, Other	Clive Oppenheimer
2J. Understanding sudden effusive-explosive transitions				
Oral Presentation July 23 AM1 (8:45-10:30) Room A6				
Chair: Kim Genareau, Gert Lube				
July 23 8:45-9:00	3A1_2J-O1	Do high lava-dome extrusion rates foreshadow explosive eruptions?	John S Pallister, Christopher G Newhall	John S Pallister
July 23 9:00-9:15	3A1_2J-O2	Revealing shallow magmatic ascent processes during the 2006 and 2010 eruptions of Merapi volcano: evidence from textural and compositional variations of feldspar microlites	Katie Preece, Ralf Gertisser, Jenni Barclay, Other	Katie Preece
July 23 9:15-9:30	3A1_2J-O3	Petrology and geochemistry of the large-magnitude 2010 eruption of Merapi volcano, Central Java, Indonesia: insights into magma dynamics	Ralf Gertisser, Katie Preece, Heather Handley, Other	Ralf Gertisser
July 23 9:30-9:45	3A1_2J-O4	Modelling the frequent transitions between explosive and effusive activity at Volcán de Colima, Mexico	Nick Varley, Yan Lavallée, William Hutchinson, Other	Nick Varley
July 23 9:45-10:00	3A1_2J-O5	Does magma rheology control eruption style? The case of Fuego, Guatemala	Alan Whittington, Thais Magaldi, Amilcar Calderas, Other	Alan Whittington
July 23 10:00-10:15	3A1_2J-O6	Reassembling a volcanic conduit using bombs at Cordón Caulle, Chile	Jonathan M Castro, C. Ian Schipper, Hugh Tuffen, Other	Jonathan M Castro
July 23 10:15-10:30	3A1_2J-O7	Explosive expansion of a slowly-decompressed magma analog: evidence of delayed bubble nucleation	Eleonora Rivalta, Karen Pascal, Jeremy Phillips, Other	Eleonora Rivalta
4C. Forecasting volcanic hazards I				
Oral Presentation July 23 AM2 (10:45-12:30) Room A6				
Chair: Antonio Costa, Koji Kiyosugi, Warner Marzocchi				
July 23 10:45-11:00	3A2_4C-O1 Invited	New methods of probabilistic hazard assessment of tephra dispersal: application to the Neapolitan area	Antonio Costa, Arnau Folch, Giovanni Macedonio, Other	Antonio Costa
July 23 11:00-11:15	3A2_4C-O2	Short-term probabilistic hazard assessment of tephra dispersal: application to the Neapolitan area	Jacopo Selva, Antonio Costa, Laura Sandri, Other	Jacopo Selva
July 23 11:15-11:30	3A2_4C-O3	Modelling thickness variability in tephra deposition	Emily Kawabata, Mark S Bebbington, Shane J Cronin, Other	Emily Kawabata
July 23 11:30-11:45	3A2_4C-O4	Estimation of Airborne Ash Density using a Real-time Volcanic Ash Dispersion Model PUFF	Hiroshi L. Tanaka, Masato Iguchi, Saburo Onodera, Other	Hiroshi L. Tanaka
July 23 11:45-12:00	3A2_4C-O5	Modeling volcanic ash resuspension. Application to the 15-16 October 2011 outbreak episode in Central Patagonia, Argentina	Arnau Folch, Leonardo Mingari, Soledad Osóres, Other	Arnau Folch

July 23 12:00-12:15	3A2_4C-O6	NWP ensembles for volcanic ash plume forecasting	Ramona Stefanescu, Marcus Bursik, Abani Patra	Marcus Bursik
July 23 12:15-12:30	3A2_4C-O7	On-line coupling of volcanic ash with global and regional meteorological models	Alex Marti, Arnau Folch	Alex Marti
1B. Magma processes in crust				
Oral Presentation July 23 AM1 (8:45-10:30) Room B1				
Chair: Olivier Bachmann, Christian Huber				
July 23 8:45-9:15	3A1_1B-O1 Invited	Generation processes of magmas of large pyroclastic eruption cycles at Aso volcano, SW Japan	Katsuya Kaneko, Takehiro Koyaguchi	Katsuya Kaneko
July 23 9:15-9:30	3A1_1B-O2	Evolution of a large, hot, restless rhyolitic magma system at Laguna del Maule, Chile	Brad S Singer, Nathan L Andersen, Martyn Unsworth, Other	Brad S Singer
July 23 9:30-9:45	3A1_1B-O3	Changing the metaphor: from magma chamber to magma reservoir	Katharine V Cashman, Guido Giordano	Katharine V Cashman
July 23 9:45-10:00	3A1_1B-O4	Amphibole barometry in rhyolitic systems: an experimental recalibration and application to the Cappadocian ignimbrites (Turkey).	Etienne Medard, Jean-Luc Le Pennec, Justine Francomme, Other	Etienne Medard
July 23 10:00-10:15	3A1_1B-O5	Experimental study of origin of silicic magmas in the primitive, intra-oceanic Tongan arc	Tracy Rushmer, Raul Brens, Simon Turner, Other	Tracy Rushmer
July 23 10:15-10:30	3A1_1B-O6	Mantle origin of basalts parental to tholeiitic differentiation products in the Andean Southern Volcanic Zone (SVZ): Confirmed by U-series disequilibria and $^{10}\text{Be}/^9\text{Be}$	M. Dungan, L. Cooper, J. Schaefer, Other	M. Dungan
1B. Magma processes in crust				
Oral Presentation July 23 AM2 (10:45-12:30) Room B1				
Chair: Georg Zellmer, Graham Hill				
July 23 10:45-11:15	3A2_1B-O7 Invited	Tomography of crustal magma bodies	Jonathan M. Lees	Jonathan M. Lees
July 23 11:15-11:30	3A2_1B-O8	Deep magma feeding system of Fuji volcano, Japan	Eiichi Takahashi, Junichi Nakajima, Kenta Asano	Eiichi Takahashi
July 23 11:30-11:45	3A2_1B-O9	Upper crustal structure of Newberry Volcano from P-wave tomography and finite difference waveform modeling	Emilie Hooft, Matthew Beachly, Douglas Toomey, Other	Emilie Hooft
July 23 11:45-12:00	3A2_1B-O10	The New Tolbachik Fissure Eruption in Kamchatka, 27.XI 2012-2013. Earthquakes Preceding the Event and First Estimates of its Duration	Sergey A. Fedotov, Alexey L. Sobisevich, Lidia B. Slavina	Sergey A. Fedotov
July 23 12:00-12:15	3A2_1B-O11	Low velocity structure beneath Kyushu island, Japan, inferred from Receiver functions.	Takuya Ueda, Hiroshi Takenaka, Takumi Murakoshi, Other	Takuya Ueda
July 23 12:15-12:30	3A2_1B-O12	Why we need ultra-deep drilling into IBM arc crust?	Yoshihiko Tamura, Yoshiyuki Tatsumi	Yoshihiko Tamura
2G. Volatile tracking of magma degassing processes and volcanic eruptions				
Oral Presentation July 23 AM1 (8:45-10:30) Room B2				
Chair: Patrick Allard, Hiroshi Shinohara				
July 23 8:45-9:00	3A1_2G-O1 Invited	Experimental constraints on deep CO ₂ -rich fluid degassing at arc volcanoes	Margaret Mangan, Thomas Sisson, William Hankins, Other	Margaret Mangan
July 23 9:00-9:15	3A1_2G-O2	CO ₂ , SO ₂ , and H ₂ S degassing related to the 2009 Redoubt eruption, Alaska	Cynthia Werner, Peter J Kelly, William C Evans, Other	Cynthia Werner
July 23 9:15-9:30	3A1_2G-O3	Magmatic gases of Gorely volcano, Kamchatka: element fluxes and comparison with MultiGas data	Yuri Taran, Ilya Chaplygin	Ilya Chaplygin
July 23 9:30-9:45	3A1_2G-O4	The magmatic-hydrothermal transition: Observations from the 2012 eruptions of White Island and Tongariro, New Zealand	Bruce W Christenson, Arthur Jolly, Karen Britten, Other	Bruce W Christenson
July 23 9:45-10:00	3A1_2G-O5	Gas emission measurements of the active lava lake of Niyragongo, DR Congo	Nicole Bobrowski, Giovanni Giuffrida, Dario Tedesco, Other	Nicole Bobrowski
July 23 10:00-10:15	3A1_2G-O6	First measurement of magma degassing processes and co-varying seismic tremor during an eruption of Piton de la Fournaise hot spot basaltic volcano, Reunion island	Patrick Allard, Alessandro La Spina, Giancarlo Tamburello, Other	Patrick Allard
2G. Volatile tracking of magma degassing processes and volcanic eruptions				
Oral Presentation July 23 AM2 (10:45-12:30) Room B2				
Chair: Alessandro Aiuppa, Yuri Taran				
July 23 10:45-11:00	3A2_2G-O7 Invited	Volatile evolution of magma plumbing system of the 2000 eruption at Miyakejima volcano deduced from melt inclusion analyses	Genji Saito, Yuichi Morishita, Hiroshi Shinohara	Genji Saito
July 23 11:00-11:15	3A2_2G-O8	The 2011-2012 submarine eruption of volatile-rich magma at El Hierro, Canary Islands	Marc-Antoine Longpré, John Stix, Nobumichi Shimizu, Other	Marc-Antoine Longpré
July 23 11:15-11:30	3A2_2G-O9	New insights on the dynamics of the most recent Plinian eruptions of Mt. Pelée (Martinique, Lesser Antilles) inferred from noble gases	Lorraine Ruzié, Guillaume Carazzo, Manuel Moreira, Other	Lorraine Ruzié
July 23 11:30-11:45	3A2_2G-O10	Gas geochemistry of the Copahue-Caviahue Volcanic Complex (Argentina).	Mariano Augusto, Franco Tassi, Alberto Caselli, Other	Mariano Augusto
July 23 11:45-12:00	3A2_2G-O11	The origin of fumarolic fluids from Tupungatito Volcano (Central Chile): new insights from volatile compositions	Oscar Benavente, Franco Tassi, Francisco Gutiérrez, Other	Oscar Benavente
July 23 12:00-12:15	3A2_2G-O12	The current degassing state of Hekla volcano, Iceland	Evgenia Ilyinskaya, Alessandro Aiuppa, Baldur Bergsson, Other	Evgenia Ilyinskaya

July 23 12:15-12:30	3A2_2G-O13	Increasing activity of Ijen Crater Lake Indonesia In 2011-2012	Sofyan Primulyana, Syegi Lenarahmi Kunrat, Ugan Boyson Saing	Sofyan Primulyana
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PROGRAM**July 23, PM**

Date/Time	No.	Title	Authors	Presenter
2A. Volcanic tremor, seismic events and volcanic conduit dynamics: understanding based on field observations, experiments, and modeling				
Oral Presentation July 23 PM1 (15:00-16:45) Room A1				
Chair: Matthew Hanney, Philippe Jousset				
July 23 15:00-15:15	3P1_2A-O15 Invited	Sources of long-period swarms and very-long-period signals during the explosive and dome-building phases of the 2009 eruption of Redoubt Volcano	Matthew M Haney, Bernard A Chouet, John J Lyons	Matthew M Haney
July 23 15:15-15:30	3P1_2A-O16	New insights into the source mechanism of long period seismic events recorded at Turrialba volcano, Costa Rica	Thomas S Eyre, Christopher J Bean, Louis De Barros, Other	Thomas S Eyre
July 23 15:30-15:45	3P1_2A-O17	Moment-tensor solutions for Long-Period (LP) volcanic sources: do they validate existing LP source models?	Ivan Lokmer, Christopher J Bean	Ivan Lokmer
July 23 15:45-16:00	3P1_2A-O18	Signs of magma ascent in LP and VLP seismic events and link to degassing: an example from the 2010 explosive eruption at Merapi volcano, Indonesia	Philippe Jousset, Agus Budi-Santoso, Arthur Jolly, Other	Philippe Jousset
July 23 16:00-16:15	3P1_2A-O19	Dynamics of Hydrothermal Activities Implied from the Complex Frequencies of Long-Period Events at Papandayan Volcano, Indonesia	Devy Kamil Syahbana, Corentin Caudron, Thierry Camelbeeck, Other	Devy Kamil Syahbana
July 23 16:15-16:30	3P1_2A-O20	When magma breaks - the source mechanisms of low frequency events at volcanoes	Sandra Karl, Jurgen W. Neuberg	Sandra Karl
July 23 16:30-16:45	3P1_2A-O21	What causes shallow short-duration low-frequency seismic events on volcanoes?	Christopher J. Bean, Louis DeBarros, Ivan Lokmer, Other	Christopher J. Bean
2A. Volcanic tremor, seismic events and volcanic conduit dynamics: understanding based on field observations, experiments, and modeling				
Oral Presentation July 23 PM2 (17:00-18:45) Room A1				
Chair: Kei Kurita, Tomoki Tsutsui				
July 23 17:00-17:15	3P2_2A-O22	Time-dependent volcanic tremor during the 2011 Kamoamoa eruption, Kilauea, Hawai'i	Katharina Unglert, Mark Jellinek, Weston Thelen, Other	Katharina Unglert
July 23 17:15-17:30	3P2_2A-O23	Meditation on the basis for volcanic tremor	Kei Kurita, Rintaro Kamata, Aika Kurokawa, Other	Kei Kurita
July 23 17:30-17:45	3P2_2A-O24	Nonlinear characteristic of magma rheology: implications for self-induced oscillation	Aika Kurokawa, Mie Ichihara, Kei Kurita	Aika Kurokawa
July 23 17:45-18:00	3P2_2A-O25	Tilt motion and volcanic tremor during lava-effusive stage in the 2011 Shinome-dake eruption	Rintaro Kamata, Minoru Takeo	Rintaro Kamata
July 23 18:00-18:15	3P2_2A-O26	Evolution of seismic reflectors beneath Sakurajima Volcano after 2008, revealed through the rounds of controlled source seismic experiments	Tomoki Tsutsui, Masato Iguchi, Takeshi Tameguri, Other	Tomoki Tsutsui
July 23 18:15-18:30	3P2_2A-O27	Shallow crustal stress field deduced from shear wave splitting measurements in Mt. Fuji region	Kohtaro Araragi, Martha K Savage, Takao Ohminato, Other	Kohtaro Araragi
July 23 18:30-18:45	3P2_2A-O28	Temporal change of Vp/Vs ratios in the upper crust during eruptions of Redoubt volcano	Tae-Kyung Hong, Eunyoung Jo	Tae-Kyung Hong
3A. Ocean island volcanoes and large igneous province				
Oral Presentation July 23 PM1 (15:00-16:45) Room A2				
Chair: Loyc Vanderkluysen, Millard F. Coffin, Maria Luisa G. Tejada				
July 23 15:00-15:15	3P1_3A-O15 Invited	Petrological interpretation of deep crustal intrusive bodies beneath oceanic hotspot provinces	Mark Richards, Eduardo Contreras-Reyes, Carolina Lithgow-Bertelloni, Other	Mark Richards
July 23 15:15-15:30	3P1_3A-O16	Intrusive breccia related to the alkaline-carbonatitic association of NW Fuerteventura (Canary Islands, Spain): a remnant of deep-seated parts of diatremes?	Cristina de Ignacio, Mercedes Munoz, Juana Sagredo, Other	Cristina de Ignacio
July 23 15:30-15:45	3P1_3A-O17	The phonolitic Cão Grande Plinian volcanism on Santo Antão, Cape Verde Islands: When, Where, How	Steffen Eisele, Armin Freundt, Steffen Kutterolf, Other	Steffen Eisele
July 23 15:45-16:00	3P1_3A-O18	A geochemical window into the magmatic architecture of the Taney Seamounts, northeast Pacific Ocean	Jason P Coumans, David A Clague, Willaim Minarik, Other	Jason P Coumans
July 23 16:00-16:15	3P1_3A-O19	Geological evidence of a post shield stage at the Juan Fernandez Ridge, Nazca Plate	Luis E Lara, Javier Reyes, Mirella Pina-Gauthier, Other	Luis E Lara
July 23 16:15-16:30	3P1_3A-O20	Can Kick 'em Jenny submarine volcano emerge? A slope stability analysis as a tool of assesment for a potential emersion in the Lesser Antilles Volcanic Arc..	Frederic Jean-Yves Dondin, Jean-Francois Marc Dorville, Richard E. Robertson	Frederic Jean-Yves Dondin
July 23 16:30-16:45	3P1_3A-O21 Invited	The geology and geochemistry of Isla Floreana, Galapagos: A different type of late-stage ocean island volcanism	Karen S Harpp, Dennis Geist	Karen S Harpp
3A. Ocean island volcanoes and large igneous province				
Oral Presentation July 23 PM2 (17:00-18:45) Room A2				
Chair: Loyc Vanderkluysen, Millard F. Coffin, Maria Luisa G. Tejada				
July 23 17:00-17:30	3P2_3A-O22 Invited	Deep volatile-induced melting, crustal melt-peridotite interactions, and the origin of primary ocean island basalts in the Earth's ambient mantle	Rajdeep Dasgupta, Ananya Mallik	Rajdeep Dasgupta

July 23 17:30-17:45	3P2_3A-O23	H2O distribution and signature in MORB glasses	Maxime Mercier, Pierre Schiano, Estelle Rose-Koga, Other	Maxime Mercier
July 23 17:45-18:00	3P2_3A-O24	Icelandic zircon: investigating felsic magmatism in a unique oceanic environment	T L Carley, C F Miller, J L Wooden, Other	T L Carley
July 23 18:00-18:15	3P2_3A-O25 Invited	Geodynamic constraints of Canarian volcanism	Joan Marti, Adelina Geyer	Joan Marti
July 23 18:15-18:30	3P2_3A-O26	New evidence for a depleted Hawaiian Plume component in Cretaceous Emperor Seamounts	Kaj Hoernle, Maxim Portnyagin, Folkmar Hauff, Other	Kaj Hoernle
July 23 18:30-18:45	3P2_3A-O27	Dynamics of mantle upwelling and outflow during Galapagos plume-ridge interaction	Sally A Gibson, Dennis J Geist, Mark A Richards	Sally A Gibson
3F. The complexity and diversity of pyroclastic fall out deposits				
Oral Presentation July 23 PM1 (15:00-16:45) Room A3				
Chair: Guido Giordano, Kazatuka Mannen				
July 23 15:00-15:15	3P1_3F-O13	Water-settled fall deposits from low to moderate intensity silicic submarine eruptions	Sharon R Allen, Rebecca J Carey, Jocelyn McPhie	Jocelyn McPhie
July 23 15:15-15:30	3P1_3F-O14	Cores for concern: The difficulty of recording tephra fallout deposits in marine sediments	Michael Cassidy, Jessica Trofimovs, Martin R Palmer, Other	Michael Cassidy
July 23 15:30-15:45	3P1_3F-O15	Is tephra stratigraphy in seasonal snow likely to be preserved? Observations from proximal deposits at Fimmvorduhals (2010) and Tolbachinsky Dol (2012-13)	Benjamin R Edwards, Alexander Belousov, Marina Belousova, Other	Benjamin R Edwards
July 23 15:45-16:00	3P1_3F-O16	The relationship between magmatic-phreatomagmatic transition and vesicularity in Heian eruption of Towada Volcano	Yoshimi Hiroi, Tsuyoshi Miyamoto	Yoshimi Hiroi
July 23 16:00-16:15	3P1_3F-O17	Fragmentation mechanism of basaltic tephra from two far-reaching historical eruptions from Katla volcano, Iceland	Johanne Schmith, Armann Höskuldsson, Gudrun Larsen, Other	Johanne Schmith
July 23 16:15-16:30	3P1_3F-O18	The 1732 phreatomagmatic eruption of Eggöey, Jan Mayen.	Eirik Gjerloew, Armann Hoskuldsson, Rolf Birger Pedersen	Eirik Gjerloew
July 23 16:30-16:45	3P1_3F-O19	Eruptive history of the barombi mbo maar, southwest cameroon, central Africa: constraints from tephrostratigraphic analysis of phreatomagmatic deposits	Boris Chako Tchamabe, Takeshi Ohba, Issa, Other	Boris Chako Tchamabe
2E. Remote sensing and terrain modelling				
Oral Presentation July 23 PM2 (17:00-18:45) Room A3				
Chair: Fred Prata, Minoru Urai, Angie Diefenbach				
July 23 17:00-17:15	3P2_2E-O1	Automated sulfur dioxide flux monitoring at Asama volcano, Japan	Toshiya Mori, Masaaki Morita, Minoru Takeo, Other	Toshiya Mori
July 23 17:15-17:30	3P2_2E-O2	Inventory of gas emission rate measurements from volcanoes of the global Network for Observation of Volcanic and Atmospheric Change (NOVAC) - present status of the network and some study cases	Bo Galle, Santiago Arellano, Ulrich Platt, Other	Bo Galle
July 23 17:30-17:45	3P2_2E-O3	Intercomparison between ground-and space-based measurements of SO2 at Popocatepetl volcano casts light into the several meteorological, instrumental and systematic biases of remote sensing.	Robin Campion, Lucio Cardenas, Matthias Fickel, Other	Robin Campion
July 23 17:45-18:00	3P2_2E-O4	Satellite-based assessment of global volcanic degassing	Simon A. Carn, Kai Yang, Verity J.B. Flower	Simon A. Carn
July 23 18:00-18:15	3P2_2E-O5	Interactive mapping of volcanic emissions with high-performance radiative transfer modeling tools	Vincent J Realmuto, Alexander Berk, David C Pieri	Vincent J Realmuto
July 23 18:15-18:30	3P2_2E-O6	An integrated study of sulphur dioxide emissions from Tungurahua volcano, Ecuador	Brendan T McCormick, Michael Herzog, Jian Yang, Other	Brendan T McCormick
July 23 18:30-18:45	3P2_2E-O7	Detection of volcanic CO2 in the August 2008 Kasatochi eruption plume by SCIAMACHY measurements	Christoph Popp, Benjamin Andrews, Kelly Chance, Other	Christoph Popp
4G. Recent eruption impacts and mitigation - a focus on both infrastructure and community volcanic hazard management				
Oral Presentation July 23 PM1 (15:00-16:45) Room A4				
Chair: Graham Leonard, Ichiro Matsuo				
July 23 15:00-15:15	3P1_4G-O1 Invited	A lengthy volcanic crisis becomes a way of life: The 14 year eruptive process of Tungurahua Volcano, Ecuador	Patricia A. Mothes, Patricio A. Ramon, Liliana P. Troncoso, Other	Patricia A. Mothes
July 23 15:15-15:30	3P1_4G-O2 Invited	Thirty years of eruption at Kilauea Volcano Hawai'i: a review of impacts and mitigation strategies	Tamar Elias, Jeff Sutton, Tim Orr, Other	Tamar Elias
July 23 15:30-15:45	3P1_4G-O3	Risk assessment of dieng volcano, central java, indonesia: one of efforts in mitigation of volcanic hazards	Imam Santosa, Supriyati Dwi Andreastuti, Asep Nursalim	Imam Santosa
July 23 15:45-16:00	3P1_4G-O4	Community-based volcano disaster risk reduction: A comparison of Barangay Biaknabato, La Castellana and Barangay Pula, Canlaon City, Negros Island, Philippines	Ma.Mylene Martinez Villegas, Lucille Rose C Del Monte, Renato U Solidum, Jr, Other	Ma.Mylene Martinez Villegas
July 23 16:00-16:15	3P1_4G-O5	Hazard perception and quantitative exposure levels at Turrialba volcano, Costa Rica; Implications for policy and practice	Saskia M van Manen	Saskia M van Manen
July 23 16:15-16:30	3P1_4G-O6	Approaches and results from the STREVA project: 12 months into STrengthening REsilience in Volcanic Areas.	Anna Hicks, Jenni Barclay, STREVA Team	Anna Hicks

July 23 16:30-16:45	3P1_4G-O7	Contribution of Volcano Monitoring to Public Health, Education, Tourism and Economic Development in Argentina.	Elizabeth I. Rovere, Silvia M. Uber, Roberto A. Violante, Other	Elizabeth I. Rovere
4G. Recent eruption impacts and mitigation - a focus on both infrastructure and community volcanic hazard management				
Oral Presentation July 23 PM2 (17:00-18:45) Room A4				
Chair: Bruce Houghton, Stephen Self				
July 23 17:00-17:15	3P1_4G-O8	Mitigation system of volcanic disasters in Japan - Scheme of volcanic alert level and some case studies	Hitoshi Yamasato	Hitoshi Yamasato
July 23 17:15-17:30	3P2_4G-O9 Invited	Regarding the responses of the national and local governments in the Kirishimayama (Shinmoedake) eruption, 2011	Kenji Niihori	Kenji Niihori
July 23 17:30-17:45	3P2_4G-O10	Increasing volcanic risk: the case of El Hierro, Canary Island, Spain.	Jose M. Marrero, Alicia Garcia, Angeles Llinares, Other	Jose M. Marrero
July 23 17:45-18:00	3P2_4G-O11	The challenge of sustained public eruption preparedness: A decade of exercises, social research and hazard mapping in Tongariro National Park	Graham S Leonard, David M Johnston, Harry Keys, Other	Graham S Leonard
July 23 18:00-18:15	3P2_4G-O12	Community Hazard Mapping: Buenos Aires Case Study, at the Santa Ana (Ilamatepec) Volcano	Jorge V Bajo Sanchez, Cecilia C Polio Lopez, Bettina Martinez-Hackert, Other	Jorge V Bajo Sanchez
July 23 18:15-18:30	3P2_4G-O13	The Determining Volcanic Risk in Auckland (DEVORA) project: source to surface, scientists to society	Elaine R Smid, Jan M Lindsay, Gill Jolly	Elaine R Smid
July 23 18:30-18:45	3P2_4G-O14	New USGS California Volcano Observatory partners with California Emergency Management Agency for hazard identification, risk assessment, and preparedness	Margaret Mangan, Johanna Fenton, Andrew Calvert, Other	Margaret Mangan
3C. Caldera				
Oral Presentation July 23 PM1 (15:00-16:45) Room A5				
Chair: Giovanni Chiodini, Takeshi Kuritani				
July 23 15:00-15:15	3P1_3C-O15 Invited	Episodes of magmatic fluid injection into hydrothermal systems and caldera unrests. The case of Campi Flegrei (Italy)	Giovanni Chiodini, Stefano Caliro, Carlo Cardellini, Other	Giovanni Chiodini
July 23 15:15-15:30	3P1_3C-O16	Mapping long-term vent opening in a caldera setting with uncertainty estimation: application to Campi Flegrei caldera (Italy)	Andrea Bevilacqua, Roberto Isaia, Antonella Bertagnini, Other	Andrea Bevilacqua
July 23 15:30-15:45	3P1_3C-O17	The Campi Flegrei Deep Drilling Project: using borehole data to model caldera unrest	Stefano Carlino, Anna Tramelli, Christopher Kilburn, Other	Stefano Carlino
July 23 15:45-16:00	3P1_3C-O18	Contemporaneous eruptions at 4.0 ka from 5.4 km apart vents within Campi Flegrei caldera (Southern Italy): a comparison to Rabaul caldera	Celine Formentaux, Roberto Isaia, Mauro Rosi, Other	Roberto Isaia
July 23 16:00-16:15	3P1_3C-O19	Is fluid injection the predominant source of Campi Flegrei (Italy) unrests? Clues from the comparison of inflations and deflations.	Antonella Amoroso, Luca Crescentini, Ilaria Sabbetta	Luca Crescentini
July 23 16:15-16:30	3P1_3C-O20	Changbai volcano: seismic tomography, origin and East-Asia tectonics	Dapeng Zhao	Dapeng Zhao
July 23 16:30-16:45	3P1_3C-O21	A preliminary evaluation of the impact of pyroclastic flows using TITAN2D at the Baekdusan volcano according to three different scenarios	Sung-Hyo Yun, Angelo Paone, Giovanni Macedonio, Other	Angelo Paone
3C. Caldera				
Oral Presentation July 23 PM2 (17:00-18:45) Room A5				
Chair: James Gill, Jiandong Xu				
July 23 17:00-17:15	3P2_3C-O22 Invited	Eruptive history of Tianchi Volcano, Changbaishan, northeast China: Process and hazard	Haiquan Wei, James Gill	James Gill
July 23 17:15-17:30	3P2_3C-O23	Major historical eruptions of Tianchi volcano, Changbai Mountain, NE China	Jianli Sui, Qicheng Fan, Ni Li	Jianli Sui
July 23 17:30-17:45	3P2_3C-O24	The millennium eruption of Changbaishan volcano in northeast China: High-precision wiggle-match radiocarbon chronology and implications	Jiandong Xu, Bo Pan, Tanzhuo Liu, Other	Jiandong Xu
July 23 17:45-18:00	3P2_3C-O25 Invited	Petrogenetic history of alkali magmatism at Baitoushan/Changbaishan volcano, China/N. Korea	Frank C Ramos, James B Gill, Corey Dimond, Other	Frank C Ramos
July 23 18:00-18:15	3P2_3C-O26	Magma system and its eruption processes of the caldera-forming 10th century eruption of Changbaishan (Baitoushan) Volcano: Inferred from petrological and geochemical characteristics	Mitsuhiro Nakagawa, Jumpei Nishimoto, Tsuyoshi Miyamoto, Other	Mitsuhiro Nakagawa
July 23 18:15-18:30	3P2_3C-O27	Tianchi Volcano Millennium Eruption (VEI 7): differentiation processes and timescale	J. Gill, F. Ramos, C. Dunlap	J. Gill
July 23 18:30-18:45	3P2_3C-O28	Changbaishan seismic monitoring network and recent unrest of the volcano	Guoming Liu	Guoming Liu
4C. Forecasting volcanic hazards I				
Oral Presentation July 23 PM1 (15:00-16:45) Room A6				
Chair: Mark Bebbington, Alex Garcia, Eliza Calder				
July 23 15:00-15:15	3P1_4C-O8 Invited	Assessing and visualising risk from multi-phase volcanic events: a new web-based modelling platform applied to Greater Tokyo, Japan	Christina R Magill, Foster Langbein, Kazutaka Mannen	Christina R Magill
July 23 15:15-15:30	3P1_4C-O9	BET_VR: a probabilistic tool for long-term volcanic risk assessment	Jacopo Selva, Alexander Garcia-Aristizabal, Angela Di Ruocco, Other	Paolo Gasparini

July 23 15:30-15:45	3P1_4C-O10	Volcanic eruption durations: Forecasts and controls.	Leanne S Gunn, Steve Blake, Chris Jones, Other	Leanne S Gunn
July 23 15:45-16:00	3P1_4C-O11	Eruption scenario of Usu volcano, Japan	Setsuya Nakada, Tsuneomi Kagiya, Mitsuhiro Nakagawa, Other	Setsuya Nakada
July 23 16:00-16:15	3P1_4C-O12	Quantifying the volcanic ash hazard to aviation in Southeast Asia	Patrick L Whelley, Chris G Newhall	Patrick L Whelley
July 23 16:15-16:30	3P1_4C-O13	Probabilistic invasion maps of long-term pyroclastic density current hazard at Campi Flegrei caldera (Italy)	Andrea Bevilacqua, Roberto Isaia, Antonella Bertagnini, Other	Augusto Neri
July 23 16:30-16:45	3P1_4C-O14 Invited	Probabilistic Hazard Mapping: A flexible Approach for Crisis Management	Eliza S Calder, Bruce E Pitman, Sarah E Ogburn, Other	Eliza S Calder
4C. Forecasting volcanic hazards I				
Oral Presentation July 23 PM2 (17:00-18:45) Room A6				
Chair: Jacopo Selva, Mark Bebbington, Christina Magill				
July 23 17:00-17:15	3P2_4C-O15	Constraints on eruption precursors from crustal structure and pore-fluid pressure	Christopher Kilburn	Christopher Kilburn
July 23 17:15-17:30	3P2_4C-O16	Evaluating the performance of models for rates of pre-eruptive seismicity	Andrew F Bell, Mark Naylor, Ian G Main	Andrew F Bell
July 23 17:30-17:45	3P2_4C-O17	The material failure forecast method as a potential eruption forecasting tool: application to the 2012 unrest episode at White Island volcano, New Zealand	Lauriane Chardot, Arthur D. Jolly, Steven Sherburn, Other	Lauriane Chardot
July 23 17:45-18:00	3P2_4C-O18	The potential role of a database in building an event probability tree: Case of Mt. Merapi eruptions	Antonius Ratdomopurbo, Chris Newhall, Joko Subandriyo, Other	Antonius Ratdomopurbo
July 23 18:00-18:15	3P2_4C-O19	Non-magmatic branches in the Bayesian Event Tree for eruption forecasting (BET_EF), and their implications for unrest tracking	Dmitri Rouwet, Laura Sandri, Warner Marzocchi, Other	Dmitri Rouwet
July 23 18:15-18:30	3P2_4C-O20	Effective decision making during volcanic crises using operations research and bayesian decision theory	Rosa Sobradelo, Rosa Sobadelo, Joan Marti, Other	Rosa Sobradelo
July 23 18:30-18:45	3P2_4C-O21	What to do when there is neither time nor a group of experts for expert elicitation?	Chris Newhall, John Pallister	Chris Newhall
1B. Magma processes in crust				
Oral Presentation July 23 PM1 (15:00-16:45) Room B1				
Chair: Jonathan Lees, Olivier Bachmann				
July 23 15:00-15:30	3P1_1B-O13 Invited	Along-arc geochemical and isotopic variations in Javanese volcanic rocks: constraints on the crustal architecture of the Sunda arc, Indonesia	Heather Handley, Janne Blichert-Toft, Simon Turner, Other	Heather Handley
July 23 15:30-15:45	3P1_1B-O14	Andesites and the continental crust	Jon P Davidson	Jon P Davidson
July 23 15:45-16:00	3P1_1B-O15	Sr-Nd-Pb-Hf isotopic study of Cretaceous to Paleogene granitic rocks from northeast Japan	Nobutaka Tsuchiya, Shinichi Kagashima, Yuka Hirahara, Other	Nobutaka Tsuchiya
July 23 16:00-16:15	3P1_1B-O16	Geophysical Investigations of Cerro Negro Volcano, Nicaragua: Insights on magmatic plumbing systems	Patricia G MacQueen, Glyn Williams-Jones, Jeffrey M Zurek	Patricia G MacQueen
July 23 16:15-16:30	3P1_1B-O17	Nature of Sub-volcanic Magma Chambers in Emeishan Province, China: Evidence from Quantitative Textural Analysis of Plagioclase Megacrysts in the Giant Plagioclase Basalts	Lilu Cheng, Ling Zeng	Lilu Cheng
July 23 16:30-16:45	3P1_1B-O18	Across arc variation of strontium isotopic and K ₂ O composition in the quaternary volcanic rocks from west java: evidence for crustal assimilation and the involvement of subducted components	Mirzam Abdurrachman, Masatsugu Yamamoto, Daizo Ishiyama, Other	Mirzam Abdurrachman
1B. Magma processes in crust				
Oral Presentation July 23 PM2 (17:00-18:45) Room B1				
Chair: Olivier Bachmann, Christian Huber				
July 23 17:00-17:30	3P2_1B-O19 Invited	Structure of the Tongariro Volcanic Complex Magmatic System, New Zealand: Insights from Magnetotelluric Imaging	Graham J Hill, T. Grant Caldwell, Yasuo Ogawa, Other	Graham J Hill
July 23 17:30-17:45	3P2_1B-O20	Magnetotelluric images of magma distribution beneath Volcan Uturuncu, Bolivia	Matthew J. Comeau, Martyn J. Unsworth, Faustino Ticona	Matthew J. Comeau
July 23 17:45-18:00	3P2_1B-O21	Towards a sharper image of the Lazufre complex in the Central Andes by combining independent data from magnetotellurics and InSAR	Heinrich Brasse, Ingmar Budach, Daniel Diaz, Other	Heinrich Brasse
July 23 18:00-18:15	3P2_1B-O22	Geophysical and laboratory constraints on the size and composition of crustal magma bodies	Martyn J Unsworth, Leila Hashim, Matthew J Comeau, Other	Martyn J Unsworth
July 23 18:15-18:30	3P2_1B-O23	Accelerating unrest within a large rhyolitic magma system during 2007-2013 at Laguna del Maule volcanic field, Chile	Helene Le Mevel, Kurt Feigl, Tabrez Ali, Other	Helene Le Mevel
July 23 18:30-18:45	3P2_1B-O24	Structural control on magmatism along divergent and convergent plate boundaries	Valerio Acocella	Valerio Acocella
2G. Volatile tracking of magma degassing processes and volcanic eruptions				
Oral Presentation July 23 PM1 (15:00-16:45) Room B2				
Chair: Margaret Mangan, Genji Saito				
July 23 15:00-15:15	3P1_2G-O14	Isobaric bubble growth and collapse in magma	Felix W von Aulock, Ben Kennedy, Christopher Oze, Other	Felix W von Aulock
July 23 15:15-15:30	3P1_2G-O15	Modelling gas transfer, storage and resulting displacement in a 3d permeable volcanic edifice	Amy S.D. Collinson, Jurgen W. Neuberg	Amy S.D. Collinson

July 23 15:30-15:45	3P1_2G-O16	New approach to evaluating the mass flux of volcanic fluids using the electrical conductivity structure of a volcano: application to Unzen volcano, SW Japan	Shogo Komori, Tsuneomi Kagiya, Jerry P Fairley	Shogo Komori
July 23 15:45-16:00	3P1_2G-O17	The redox state of volcanic gases: a reflection of magma depth.	Yves Moussallam, Clive Oppenheimer, Bruno Scaillet, Other	Yves Moussallam
July 23 16:00-16:15	3P1_2G-O18	Magma degassing, oxidation, and gas adsorption processes during a series of ash eruptions in progress at the Sakurajima volcano, Kagoshima, Japan	Isoji Miyagi, Hiroshi Shinohara, Jun'ichi Itoh	Jun'ichi Itoh
July 23 16:15-16:30	3P1_2G-O19	Remote temperature sensing of volcanic fumaroles using hydrogen isotopes of excess molecular hydrogen in plumes	Ururu Tsunogai, Daisuke D Komatsu, Fumiko Nakagawa	Ururu Tsunogai

2G. Volatile tracking of magma degassing processes and volcanic eruptions

Oral Presentation July 23 PM2 (17:00-18:45) Room B2

Chair: Nicole Bobrowski, Kim Berlo

July 23 17:00-17:15	3P2_2G-O20 Invited	Petro-geochemical evidence for vapour transport in andesite shear fractures	Melissa Plail, Marie Edmonds, Jenni Barclay, Other	Melissa Plail
July 23 17:15-17:30	3P2_2G-O21	Chemical heterogeneity in rhyolite caused by magma degassing	Kim Berlo, Hugh Tuffen, Victoria Smith, Other	Kim Berlo
July 23 17:30-17:45	3P2_2G-O22	The surface tension of rhyolite from combined experiments and numerical modeling	Helge M Gonnermann, James E Gardner	Helge M Gonnermann
July 23 17:45-18:00	3P2_2G-O23	A condition of degassing magma deduced by the chemical and isotopic ratio of fumarolic gas	Takeshi Ohba	Takeshi Ohba
July 23 18:00-18:15	3P2_2G-O24	Diffusive Helium Emissions as a Precursory Sign of Volcanic Unrest at El Hierro Island, Canary Islands, Spain	Eleazar Padron, Nemesio M Perez, Pedro A Hernandez, Other	Eleazar Padron
July 23 18:15-18:30	3P2_2G-O25	Helium isotope geochemistry of thermal springs and volcanic gases from Guadeloupe, Lesser Antilles	Philippe Jean-Baptiste, Patrick Allard, Elise Fourre, Other	Philippe Jean-Baptiste
July 23 18:30-18:45	3P2_2G-O26	Methane efflux from the soil and methanotrophic activity in volcanic-geothermal areas: Examples from Italy and Greece	Antonina Lisa Gagliano, Walter D'Alessandro, Francesco Parelo, Other	Walter D'Alessandro

2A. Volcanic tremor, seismic events and volcanic conduit dynamics: understanding based on field observations, experiments, and modeling

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_2A-P1	Studying low-energy seismic activity in Elbrus volcanic area using underground seismic array	Valeriy Kovalevskiy	Valeriy Kovalevskiy
July 23 Poster	3W_2A-P2	Volcanic activity of Mount Guntur over the 22 last year	Hendra Gunawan, Mochamad Hendrasto, Hetty Triastuti, Other	Hendra Gunawan
July 23 Poster	3W_2A-P3	The Eruption of Mount Sinabung after long dormancy	Muhamad Hendrasto, Kristianto, Hendra Gunawan, Other	Muhamad Hendrasto
July 23 Poster	3W_2A-P4	Earthquake relocations and InSAR time series analysis of the June 12th 2011 eruption of Nabro Volcano, Afar	Joanna E Hamlyn, Tim J Wright, Carolina Pagli, Other	Joanna E Hamlyn
July 23 Poster	3W_2A-P5	Seismic swarm activity in Maruyama volcano, Hokkaido, Japan	Masayoshi Ichiyanagi, Masamitsu Takada, Teruhiro Yamaguchi, Other	Masayoshi Ichiyanagi
July 23 Poster	3W_2A-P6	Seismic events accompanying the effusive-explosive eruption of Kizimen volcano (Kamchatka) in December 2009 - January 2013.	Pavel Pavlovich Firstov, Alexandra Albertovna Shakirova	Alexandra Albertovna Shakirova
July 23 Poster	3W_2A-P7	Relation between tilt oscillation and seismicity during the 1991-1995 dome eruption at Unzen Volcano, Japan	Kodo Umakoshi, Takuya Komiya, Ken'ichiro Yamashina, Other	Kodo Umakoshi
July 23 Poster	3W_2A-P8	Source dynamics of vulcanian explosions analysed with a high-resolution multicomponent seismic arrays technique	Lamberto Adolfo Inza, Jean-Philippe Metaxian, Jerome Mars, Other	Jean-Philippe Metaxian
July 23 Poster	3W_2A-P9	Explosive activity at Santiaguito Dome (Guatemala): insights from Fast MoUltiparametric Setup	Piergiorgio Scarlato, Daniele Andronico, Elisabetta Del Bello, Other	Elisabetta Del Bello
July 23 Poster	3W_2A-P10	Volcano tectonic earthquakes related with the large scale uplift of Iwojima Volcano, Japan	Hideki Ueda, Yuhki Kohno, Eisuke Fujita, Other	Hideki Ueda
July 23 Poster	3W_2A-P11	Source mechanism of explosive eruptions: seismic moment tensor inversion coupled with infrasound analysis	Keehoon Kim, Jonathan M. Lees, Mario Ruiz	Keehoon Kim
July 23 Poster	3W_2A-P12	A fluctuating lava lake at Villarrica volcano, Chile, inferred from repetitive long-period seismic and infrasonic arrivals in conjunction with persistent infrasonic tremor	Joshua P. Richardson, Gregory P. Waite	Joshua P. Richardson
July 23 Poster	3W_2A-P13	Explosion quakes and Long Period events with similar waveforms at Tungurahua volcano (Ecuador)	Jean Battaglia, Mario Ruiz	Jean Battaglia
July 23 Poster	3W_2A-P14	Source process of long-period seismic events at Taal volcano, Philippines: Vapor transportation and condensation in a shallow hydrothermal fissure	Yuta Maeda, Hiroyuki Kumagai, Rudy Lacson Jr., Other	Yuta Maeda
July 23 Poster	3W_2A-P15	Intermittent inflations recorded by broadband seismometers prior to caldera formation at Miyake-jima volcano in 2000	Tomokazu Kobayashi, Takao Ohminato, Yoshiaki Ida, Other	Tomokazu Kobayashi
July 23 Poster	3W_2A-P16	Two-decades-long broadband seismic observations at Aso volcano, Japan	Mare Yamamoto, Takahiro Ohkura, Satoshi Kaneshima, Other	Mare Yamamoto

July 23 Poster	3W_2A-P17	Spatio-temporal variations of the volcanic tremors during 2011 Kirishima eruption estimated by dense seismic array	Manami Nakamoto, Satoshi Matsumoto, Yoshiko Yamanaka, Other	Manami Nakamoto
July 23 Poster	3W_2A-P18	Detection and location of weak continuous tremor episodes using a seismic array during the 2011 Shinmoedake eruption activity of Kirishima volcano, southwest Japan	Haruhisa Nakamichi, Yoshiko Yamanaka, Toshiko Terakawa, Other	Haruhisa Nakamichi
July 23 Poster	3W_2A-P19	Filtering wind noise in seismic and infrasonic data by Non-negative Matrix Factorization: methodology and case studies	Roberto Carniel, Giuseppe Cabras, Minoru Takeo, Other	Roberto Carniel
July 23 Poster	3W_2A-P20	4D velocity and attenuation tomography at Etna volcano (Italy) during 1994-2008	Graziella Barberi, Ornella Cocina, Pasquale De Gori, Other	Domenico Patane'
July 23 Poster	3W_2A-P21	Three-Dimensional Modelling of stress-induced anisotropy with application to Mount Asama, Japan	Adrian F Shelley, Martha K Savage, Charles Williams, Other	Adrian F Shelley
July 23 Poster	3W_2A-P22	Enhanced multi-parameter monitoring network in Taal Volcano, Philippines	Melquiades S. Figueroa II, Rudy A. Lacson Jr., Hiroyuki Kumagai, Other	Melquiades S. Figueroa II
2D. Imaging and monitoring of volcanic activity				
Poster Presentation July 23 Core Time (13:30-15:00)				
July 23 Poster	3W_2D-P1	Upwelling Fluids interpreted by 3D Electrical Resistivity Structure beneath island-arc volcanoes in Kyushu, southern Japan	Maki Hata, Naoto Oshiman, Ryokei Yoshimura, Other	Maki Hata
July 23 Poster	3W_2D-P2	Study of magma accumulation and supply processes at Sakurajima volcano from 1998 to 2005	Kohei Hotta, Takahiro Ohkura, Masato Iguchi, Other	Kohei Hotta
July 23 Poster	3W_2D-P3	A novel hydrological observation using cosmic ray air showers : A measurement of underground water stream on Sakurajima volcano	Akimichi Taketa, Shuhei Okubo, Masato Iguchi, Other	Akimichi Taketa
July 23 Poster	3W_2D-P4	Magnetotelluric monitoring at Sakurajima volcano, Japan	Koki Aizawa, Takao Koyama, Hideaki Hase, Other	Koki Aizawa
July 23 Poster	3W_2D-P5	Temporal geomagnetic field changes on Sakurajima volcano, Kyushu Japan, obtained by repeated aeromagnetic survey.	Mitsuru Utsugi, Wataru Kanda, Takeshi Hashimoto, Other	Mitsuru Utsugi
July 23 Poster	3W_2D-P6	Continuous GPS measurement in Kuchinoerabujima volcano, Kyushu, Japan	Eiji Saito, Masato Iguchi, Nobuo Matsushima, Other	Eiji Saito
July 23 Poster	3W_2D-P7	The temporal changes of the shallower resistivity structure associated with the eruption on 2011 at Aso volcano, Japan.	Mitsuru Utsugi, Naoaki Tokumoto, Tsuneomi Kagiya, Other	Mitsuru Utsugi
July 23 Poster	3W_2D-P8	Resistivity structure around the Aira caldera, SW Japan, inferred from the magnetotelluric measurements	Wataru Kanda, Takafumi Kasaya, Hiroshi Yakiwara, Other	Wataru Kanda
July 23 Poster	3W_2D-P9	Resistivity structure in southern part of Zao volcano, Japan	Hideaki Hase, Shin'ya Sakanaka, Takao Koyama, Other	Hideaki Hase
July 23 Poster	3W_2D-P10	La Soufrière de Guadeloupe volcano large-scale electrical resistivity 3D imaging	Nolwenn Lesparre, Bartłomiej Grychtol, Dominique Gibert, Other	Nolwenn Lesparre
July 23 Poster	3W_2D-P11	Temporal variations of self-potential at summit area of Izu-Oshima volcano	Nobuo Matsushima, Yuji Nishi, Shinya Onizawa, Other	Nobuo Matsushima
July 23 Poster	3W_2D-P12	3-D density modeling of the EGM2008 gravity field over the Mt. Paekdu volcanic area	Sungchan Choi, Chang-Whan Oh, H.-J. Götze, Other	Sungchan Choi
July 23 Poster	3W_2D-P13	Resistivity structure around Chishinshan volcano area in Taitung Volcano Group, northern Taiwan, revealed by AMT surveys.	Shogo Komori, Mitsuru Utsugi, Tsuneomi Kagiya, Other	Shogo Komori
July 23 Poster	3W_2D-P14	An attempt for magnetometric detection of the hydrothermal reservoir beneath Taal Volcano (Philippines)	Yoichi Sasai, Paul Karson B. Alanis, Makoto Harada, Other	Yoichi Sasai
July 23 Poster	3W_2D-P15	Magnetic signatures of volcanic unrest: learning from long-term data at Mt Etna, Stromboli and La Fournaise volcano	Rosalba Napoli, Jacques Zlotnicki, Gilda Currenti, Other	Rosalba Napoli
July 23 Poster	3W_2D-P16	3Dmagnetic modeling of damavands magma chamber and seismic concepts	Amin Abbasi, Farzaneh Farahani, Loghman Namaki	Farzaneh Farahani
July 23 Poster	3W_2D-P17	TILTMETER OBSERVATIONS IN KAMCHATKA REGION. KLUCHEVSKOY VOLCANO MONITORING BY TILTMETERS NETWORK. RUSSIA.	Sergey Serovetnikov, Hiroaki Takahashi	Sergey Serovetnikov
July 23 Poster	3W_2D-P18	2005-2010 InSAR time series at Dallol, a proto-volcanic system in North Afar (Ethiopia)	Adriano Nobile, Carolina Pagli, Joel Ruch, Other	Adriano Nobile
July 23 Poster	3W_2D-P19	Geology of a volcanic edifice selected as a reference experimental site for structure imaging using muography and standard geophysical methods: the Puy de Dome volcano, Chaîne des Puys, France	Didier Miallier, Pierre Boivin, Philippe Labazuy	Didier Miallier
July 23 Poster	3W_2D-P20	Geophysical study of a volcanic edifice for comparison with muon imaging	Jean-Francois Lenat, Angelie Portal, Philippe Labazuy, Other	Jean-Francois Lenat
July 23 Poster	3W_2D-P21	A telescope for rock mass density imaging based on muon TPC with Micromegas detector	Stephane Gaffet, Pierre Salin, Fanny Hivert, Other	Stephane Gaffet
July 23 Poster	3W_2D-P22	The DIAPHANE telescopes: architecture and recent upgrades	Jacques E Marteau, Dominique Gibert, Kevin Jourde, Other	Jacques E Marteau
July 23 Poster	3W_2D-P23	Density variations in La Soufrière de Guadeloupe detected with muon radiography: relation with hydrothermal activity	Kevin Jourde, Dominique Gibert, Jacques Marteau, Other	Dominique Gibert
July 23 Poster	3W_2D-P24	Influence of a perturbing backward upward flux on the quality of muon tomography	Kevin Jourde, Jacques Marteau, Dominique Gibert, Other	Kevin Jourde

July 23 Poster	3W_2D-P25	Application of emulsion imaging system for cosmic-ray muon radiography to explore the internal structure of Teide and Cumbre Vieja volcanoes in the Canary Islands, Spain	Inigo Hernandez, Hiroyuki Tanaka, Pedro A Hernandez, Other	Eleazar Padron
July 23 Poster	3W_2D-P26	Perspectives for the analysis of the internal structure of Colima volcano using muon radiography	Servando De La Cruz-Reyna, Jose F. Valdes-Galicia, Hiroyuki K.M. Tanaka, Other	SERVANDO De La Cruz-Reyna
July 23 Poster	3W_2D-P27	Potential of muon tomography for identifying internal structure of the andesite volcanoes of Tongariro National Park, New Zealand	Tony Hurst, Agnes Mazot	Agnes Mazot
July 23 Poster	3W_2D-P28	Possible application of stroboscopic muography to monitoring periodic eruptions	Hiroyuki K.M. Tanaka	Hiroyuki K.M. Tanaka
July 23 Poster	3W_2D-P29	Operation of a muon detection system under extremely high humidity environment for monitoring underground water table	Akira Sannomiya, Hiroyuki K.M. Tanaka, Koichiro Tada	Akira Sannomiya
July 23 Poster	3W_2D-P30	A Study on Cosmic Ray Muon Energy Spectra for Radiography	Koji Aramaki, Kentaro Osawa	Koji Aramaki
July 23 Poster	3W_2D-P31	Interrogating the Martian Subsurface using Muon Radiography	Sharon Kedar, Hiroyuki Tanaka, Charles Naudet, Other	Sharon Kedar
July 23 Poster	3W_2D-P32	Ground deformation associated with the eruption of Lumpur Sidoarjo mud volcano, East Java, Indonesia	Teguh P Sidiq, Yosuke Aoki	Teguh P Sidiq

2G. Volatile tracking of magma degassing processes and volcanic eruptions

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_2G-P1	Vesicle evolution in magma conduits - implications for the processes of silicic magma ascent	Antonio M. Alvarez-Valero, Juan Gomez-Barreiro, Javier Borrajo, Other	Antonio M. Alvarez-Valero
July 23 Poster	3W_2G-P2	Volatile and light lithophile trace element geochemistry of the 2010 eruption of Merapi volcano revealed by melt inclusions	Katie Preece, Ralf Gertisser, Kim Berlo, Other	Katie Preece
July 23 Poster	3W_2G-P3	Volcanic gases as precursor of the 2010 Merapi explosive eruption	Hanik Humaida, Euis Sutaningsih, Kurniadi Rinekso, Other	Hanik Humaida
July 23 Poster	3W_2G-P4	Quantitative analysis of water concentration in melt inclusions by reflectance micro-FTIR spectroscopy	Atsushi Yasuda	Atsushi Yasuda
July 23 Poster	3W_2G-P5	Investigating pore-scale processes controlling the volatile transport in silicic magma reservoirs.	Andrea Parmigiani, Christian Huber, Olivier Bachmann	Andrea Parmigiani
July 23 Poster	3W_2G-P6	Automatic continuous observations of SO ₂ flux at Suwanose-jima volcano, Southwest Japan	Masaaki Morita, Toshiya Mori	Masaaki Morita
July 23 Poster	3W_2G-P7	Comparison of seismo-acoustic and SO ₂ measurement at Tungurahua volcano (Ecuador) between 2010 and 2012	Jean Battaglia, Silvana Hidalgo, Alexander L. Steele, Other	Jean Battaglia
July 23 Poster	3W_2G-P8	Gas geochemistry of geothermal fluids from the Copahue Caviahue Volcanic Complex (Argentina)	Mariano Augusto, Franco Tassi, Alberto Caselli, Other	Mariano Augusto
July 23 Poster	3W_2G-P9	Volatile leakage from the crater bottom of Teishi Knoll of Izu-Tobu Volcanoes, Japan, 23 years after the 1989 submarine eruption	Kenji Notsu, Rumi Sohrin, Hideki Wada, Other	Kenji Notsu
July 23 Poster	3W_2G-P10	1. An increasing trend of diffuse CO ₂ emission from Teide volcano (Tenerife, Canary Islands): geochemical evidence of magma degassing episodes	German D. Padilla, Nemesio M. Perez, Pedro A. Hernandez, Other	German D. Padilla
July 23 Poster	3W_2G-P11	Diffuse CO ₂ Monitoring at Cerro Negro Volcano, Nicaragua	Jose Barrancos, Martha Ibarra, Gladys Melian, Other	Barrancos Jose
July 23 Poster	3W_2G-P12	Mixing and degassing processes in the Skuggafjöll eruption, Iceland: Insights from coincident volatile and trace element melt inclusion analyses.	David A Neave, John MacLennan, Marie Edmonds, Other	David A Neave
July 23 Poster	3W_2G-P13	Magma reservoir-vent system within Miyake-jima volcano revealed by GPS observations of crustal deformation associated with the emission of volcanic gas	Jun Oikawa, Shigeru Nakao, Takeshi Matsushima	Jun Oikawa
July 23 Poster	3W_2G-P14	Research on mud volcano in northern tianshan based on geochemistry causes	Xiaoqi Gao	Xiaoqi Gao

3A. Ocean island volcanoes and large igneous province

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_3A-P1	A stratigraphic and structural reconstruction of a complex terrane in an Archean large igneous province: the Redeemer-Raroonga mine corridor, Agnew, Eastern Goldfields, Western Australia	Patrick C Hayman, Ray AF Cas, Ian H Campbell, Other	Patrick C Hayman
July 23 Poster	3W_3A-P2	Wide compositional range of enriched continental flood basalts derived from a long-term depleted mantle source: a case from the Karoo large igneous province	Jussi S Heinonen, Arto V Luttinen	Jussi S Heinonen
July 23 Poster	3W_3A-P3	Olivine-hosted melt inclusions in Mg- and Fe-rich magmas: Tracing mantle source and crustal processing in the Paraná-Etendeka LIP	Eleanor S Jennings, Sally A Gibson, John MacLennan	Eleanor S Jennings
July 23 Poster	3W_3A-P4	Lead isotopic record of Barremian-Aptian marine sediments: Implications for large igneous provinces and the Aptian climatic crisis	Junichiro Kuroda, Katsuhiko Suzuki, Naohiko Ohkouchi	Junichiro Kuroda
July 23 Poster	3W_3A-P5	Is there a genetic relationship between the Dead Sea Transform and the western Arabia LIP?	Yishai Weinstein	Yishai Weinstein

July 23 Poster	3W_3A-P6	New insights into composition and source, single or multistage emplacement, and relationship to eruption cycles from first drilling of volcanic island landslides, offshore Montserrat	Peter Talling, Sebastian Watt, Michael Cassidy, Other	Peter Talling
July 23 Poster	3W_3A-P7	Edifice collapse processes and the volcano-magmatic response to collapse	Sebastian F.L. Watt, Michael Cassidy, Peter J. Talling	Sebastian F.L. Watt
July 23 Poster	3W_3A-P8	Deformation processes before, during, and after the March 2011 Kamoamo fissure eruption, Kilauea Volcano, Hawai'i	Paul Lundgren, Michael Poland, Asta Miklius	Paul Lundgren
July 23 Poster	3W_3A-P9	Investigating the formational mechanism of the Ninole hills on Mauna Loa, Hawaii, through gravity surveys	Jeffrey M Zurek, Glyn Williams-Jones, Frank Trusdell	Jeffrey M Zurek
July 23 Poster	3W_3A-P10	Olivine crystallization pressures within Kilauea's lower east rift zone: the use of rehomogenized melt inclusions to interpret magma transport, storage, and energetic fountain	Robin M Tuohy, Paul J Wallace, Donald A Swanson	Robin M Tuohy
July 23 Poster	3W_3A-P11	Kilauea's magma plumbing system	Michael P. Poland, Asta Miklius, Emily K. Montgomery-Brown	Michael P. Poland
July 23 Poster	3W_3A-P12	The duration of the shield stage of Hawaiian volcano; unspiked K-Ar dating of the submarine tholeiites from Koolau volcano	Seiko Yamasaki, Takahiro Tagami, Eiichi Takahashi	Seiko Yamasaki
July 23 Poster	3W_3A-P13	Signals of volcanic collapses in the centralwest part of the island of Fuerteventura (Canary Islands, Spain) and their relationship with the intrusive complexes.	Angela Claro, Cristina de Ignacio, Mercedes Muñoz	Angela Claro
July 23 Poster	3W_3A-P14	Depths of magma reservoirs at oceanic island volcanoes: the magmatic system of El Hierro (Canary Islands) during the 2011-2012 eruption inferred using satellite geodesy	Pablo J. Gonzalez, Sergey V. Samsonov, Susi Pepe, Other	Pablo J. Gonzalez
July 23 Poster	3W_3A-P15	Temporal succession, intensities, and magmatic evolution of large-magnitude Plinian eruptions from Fogo and Brava, Cape Verde Islands	Steffen Eisele, Armin Freundt, Steffen Kutterolf, Other	Steffen Eisele
July 23 Poster	3W_3A-P16	Explosive volcanism from the Galapagos hotspot: evidence from Miocene marine tephra found during IODP Expedition 334 and 344	Steffen Kutterolf, Julie C Schindlbeck, Susanne Straub, Other	Steffen Kutterolf
July 23 Poster	3W_3A-P17	Petrology and thermochronology of the Juan Fernandez Ridge (Nazca Plate)	Javier Reyes, Luis E. Lara	Javier Reyes
July 23 Poster	3W_3A-P18	Evolution of silicic magmas at Icelandic central volcanoes during rift relocations	Tenley J. Banik, Calvin F. Miller, Ármann Höskuldsson, Other	Tenley J. Banik
July 23 Poster	3W_3A-P19	Volcanic activity history of Ito I Island in Ogasawara Archipelago estimated by the terrace chronology and crustal deformation observation	Takayuki Nakano, Tetsuro Imakiire, Mamoru Koarai, Other	Takayuki Nakano
July 23 Poster	3W_3A-P20	Is Ryukyu Subduction Tectonic Activity Driving Intraplate Volcanism in Korea?	Marco Brenna, Shane J Cronin, Jan Wijbrans, Other	Marco Brenna

3B. Monogenetic volcanism

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_3B-P1	Petrology of the melilititic and nephelinitic rock suites in the Lake Natron-Engaruka monogenetic volcanic field, northern Tanzania	Hannes B Mattsson, Rohit H Nandedkar, Peter Ulmer	Hannes B Mattsson
July 23 Poster	3W_3B-P2	Seismological evidences of a potential birth of a monogenetic volcano	Denis Legrand, Klaus Bataille, Jose Cembrano, Other	Denis Legrand
July 23 Poster	3W_3B-P3	Eruptive Event Determination; Harrat Rahat, Saudi Arabia	Melody G Runge, Mark Bebbington, Shane J Cronin, Other	Melody G Runge
July 23 Poster	3W_3B-P4	Karioi volcano, western North Island, New Zealand: a behind arc polygenetic intraplate-convergent margin volcanic complex	Roger M Briggs, Gordon G Goles, Roland Maas	Roger M Briggs
July 23 Poster	3W_3B-P5	Insights into volcanic fissure eruption dynamics based on detailed field mapping and geochemical analysis: A case study of the Mt. Eccles Volcanic Complex, south-eastern Australia	Janine L Kavanagh, Julie Boyce, Ray A F Cas, Other	Janine L Kavanagh
July 23 Poster	3W_3B-P6	Understanding geomorphic data of monogenetic scoria cones	Gabor Kereszturi, Karoly Nemeth	Gabor Kereszturi
July 23 Poster	3W_3B-P7	Uranium series - size correlations in intraplate basaltic volcanic fields: source control on physical parameters	Lucy E McGee, Heather K Handley, Christoph Beier, Other	Ian E M Smith
July 23 Poster	3W_3B-P8	Unraveling the eruption dynamics of the complex volcanology at the 5 ka Mt. Gambier Volcanic Complex, south-eastern Australia	Jozua van Otterloo, Ray A.F. Cas, Massimo Raveggi	Jozua van Otterloo
July 23 Poster	3W_3B-P9	New insight into the timing of volcanism at Salton Buttes, California from $^{40}\text{Ar}/^{39}\text{Ar}$ dating and paleomagnetism	Heather M Wright, Margaret T Mangan, Duane E Champion, Other	Heather M Wright
July 23 Poster	3W_3B-P10	Abu monogenetic volcano group in SW Japan Arc: its characteristic landforms, eruption types, and magma genesis	Takashi Nagao, Koji Kiyosugi, Yoshiyuki Horikawa, Other	Susumu Kakubuchi
July 23 Poster	3W_3B-P11	Petrography and Ar isotopic information of nosean in the phonolite in East Eifel volcanic field, Germany: investigation of the source of excess ^{40}Ar	Masafumi Sudo, Uwe Altenberger	Masafumi Sudo
July 23 Poster	3W_3B-P12	Complex interaction between Strombolian and phreatomagmatic eruptions in the Miocene monogenetic volcanism of the Harrat Shama Volcanic Field (SW of Saudi Arabia)	Ezz El Din Abdel Hakim Khalaf, Ali Abdel Motelib	Ezz El Din Abdel Hakim Khalaf

3C. Caldera				
Poster Presentation July 23 Core Time (13:30-15:00)				
July 23 Poster	3W_3C-P1	Volcano-tectonic evolution from Cretaceous to Paleogene time in SW Japan	Hiroaki Komuro, Atsushi Kamei	Atsushi Kamei
July 23 Poster	3W_3C-P2	Spatiotemporal variations of geochemical characteristics of volcanic rocks from Aso volcano, SW Japan	Taro Shinmura, Yoji Arakawa, Isoji Miyagi, Other	Taro Shinmura
July 23 Poster	3W_3C-P3	Lateral magma intrusion from a caldera-forming magma chamber: Constraints from geochronology and geochemistry of volcanic products from lateral cones around the Aso caldera, SW Japan	Masaya Miyoshi, Taro Shinmura, Hirochika Sumino, Other	Masaya Miyoshi
July 23 Poster	3W_3C-P4	Unusually high-temperature andesitic magma erupted shortly before the Aso-2 pyroclastic flow from Aso caldera, Japan	Koshi Nishimura, Yasuo Miyabuchi, Hirohito Inakura, Other	Yasuo Miyabuchi
July 23 Poster	3W_3C-P5	Volcanic history of western margin of Aira caldera based on K-Ar geochronology	Masafumi Sudo, Kozo Uto, Daisuke Miki, Other	Masafumi Sudo
July 23 Poster	3W_3C-P6	Holocene uplift of Aira caldera, southern Japan	Hiroshi Moriwaki, Mitsuru Okuno, Toshiro Nagasako, Other	Hiroshi Moriwaki
July 23 Poster	3W_3C-P7	Cycles of magma activities leading to catastrophic eruptions in aira caldera in Kyushu, Japan	Yuko Sekiguchi, Toshiaki Hasenaka, Shinji Nagaoka, Other	Toshiaki Hasenaka
July 23 Poster	3W_3C-P8	Caldera structure of Izu Oshima Volcano, Japan. revealed by new drilling survey	Yoshihisa Kawanabe	Yoshihisa Kawanabe
July 23 Poster	3W_3C-P9	The origin and magmatic evolution of Quaternary lavas of Sakurajima volcano, southern Kyushu Island, Japan: inferred from Geochemical and Sr-Nd-Pb isotopic constraints	Tomoyuki Shibata, Jun Suzuki, Masako Yoshikawa, Other	Tomoyuki Shibata
July 23 Poster	3W_3C-P10	Near-vent morphology and dispersion timing of the climactic PDC in 7300 BP marine caldera formation of Kikai caldera in southern-off Kyushu Island, through seismic reflection survey	Fumihiko Ikegami, Shoichi Kiyokawa, Hisashi Oiwane, Other	Fumihiko Ikegami
July 23 Poster	3W_3C-P11	Frequency of a caldera forming eruption occurred in the Kyushu Island on the basis of the high-resolution tephra stratigraphic record in the Kinki district, central Japan	Yoshitaka Nagahashi	Yoshitaka Nagahashi
July 23 Poster	3W_3C-P12	Modern iron sedimentation and hydrothermal activity at post Kikai Caldera volcano in Satsuma Iwo-Jima, Kagoshima, Japan: To understand modern bedded iron formation at shallow hydrothermal environment	Shoichi Kiyokawa, Takuya Ueshiba, Yuto Minowa, Other	Shoichi Kiyokawa
July 23 Poster	3W_3C-P13	The stratigraphy of Pliocene to middle Pleistocene pyroclastic deposits, Miyagi Prefecture, Japan	Takahiro Kuzumaki, Akihiko Fujinawa, Tsukasa Ohba	Takahiro Kuzumaki
July 23 Poster	3W_3C-P14	Volcanic history of the Takahara Volcano, Northeast Japan arc: Inference of the caldera activity	Kensuke Tsurumaki	Kensuke Tsurumaki
July 23 Poster	3W_3C-P15	Post and pre caldera eruption history of Miyakejima Volcano - Entombment process of Hachodaira Caldera and eruption history of pre A.D. 2000 Caldera -	Teruki Oikawa, Nobuo Geshi	Teruki Oikawa
July 23 Poster	3W_3C-P16	Were the Pre Lower Pumice 1, Lower Pumice 1 and Lower Pumice 2 eruption sequences sourced from the same magma reservoir, Santorini Caldera, Greece?	Jack M. Simmons, Ray A.F. Cas, Timothy H. Druitt, Other	Jack M. Simmons
July 23 Poster	3W_3C-P17	Long-term volcanism around active calderas in Bali and Tengger-Bromo region, East Java, Sunda arc	Kiyoshi Toshida, Shingo Takeuchi, Ryuta Furukawa, Other	Kiyoshi Toshida
July 23 Poster	3W_3C-P18	Vent migration and caldera collapse during the Minoan eruption of Santorini	Timothy H Druitt	Timothy H Druitt
July 23 Poster	3W_3C-P19	The 2008 eruption of Okmok volcano, Alaska: Ascent of magma into shallow intracaldera groundwater system and resulting ephemeral landforms	Christina Neal, Jessica Larsen, Zhong Lu, Other	Christina Neal
July 23 Poster	3W_3C-P20	Linking lava domes to their structural setting	Paul A Ashwell, Ben M Kennedy, Darren M Gravely, Other	Paul A Ashwell
July 23 Poster	3W_3C-P21	Petrology and geochemistry of the 2011 eruption of Nabro, Eritrea	Amy R Donovan, Clive Oppenheimer, Juan Andujar, Other	Amy R Donovan
July 23 Poster	3W_3C-P22	Probable time correlation between the eruption of Baitoushan volcano and the megathrust earthquakes in Japan	Hiromitsu Taniguchi	Hiromitsu Taniguchi
July 23 Poster	3W_3C-P23	The Mt. Paektu Geoscientific Experiment	Un Young Gun, Ju Un Ok, Kim Myong Song, Other	Un Young Gun
July 23 Poster	3W_3C-P24	Formation of Qixiangshan Eruption of Changbaishan Tianchi Volcano, China	Bo Pan, Jiandong Xu, Guangpei Zhong, Other	Bo Pan
July 23 Poster	3W_3C-P25	Textural characteristics of the Holocene pumice erupted from Changbaishan volcano and their volcanological implications	Hongmei Yu, Jiandong Xu, Jianping Wu, Other	Hongmei Yu
July 23 Poster	3W_3C-P26	Characteristics of Pyroclastic-flow Facies in Millennium Eruption of Tianchi Volcano, Changbai Mountains, China	Bo Zhao, Jian Dong Xu, Bo Pan, Other	Bo Zhao
July 23 Poster	3W_3C-P27	History of Volcanic Activity, Magma Evolution and Eruptive Mechanisms of the Changbaishan Volcanic Province	Qicheng Fan, Jianli Sui, Ni Li, Other	Qicheng Fan
July 23 Poster	3W_3C-P28	ORIGIN OF CENOZOIC BASALTIC LAVAS IN THE ERDAOBAIHE RIVER VALLY, CHANGBAISHAN, CHINA	Qingfu Yang, Xiang Liu, Fengxue Chen, Other	Qingfu Yang

July 23 Poster	3W_3C-P29	Volcanic geology, geochronology and geochemistry information provided by the Halaha River and Chaoer River volcanic field in Daxing'an Mountain Range	YongWei Zhao, QiCheng Fan	YongWei Zhao
July 23 Poster	3W_3C-P30	Origin of Cenozoic basaltic magmatism at Changbaishan volcanic field, northeast China	Takeshi Kuritani, Jun-Ichi Kimura, Eiji Ohtani	Takeshi Kuritani
July 23 Poster	3W_3C-P31	New insights from pumice-rich submarine density currents from caldera-forming eruptions in the Izu Bonin arc (ODP 126)	Martin Jutzeler, James DL White	Martin Jutzeler
3F. The complexity and diversity of pyroclastic fall out deposits				
Poster Presentation July 23 Core Time (13:30-15:00)				
July 23 Poster	3W_3F-P1	Two far-reaching historical eruptions from Katla volcano, Iceland: Fragmentation mechanism of the basaltic tephra	Johanne Schmith, Ármann Höskuldsson, Gudrun Larsen, Other	Johanne Schmith
July 23 Poster	3W_3F-P2	The role of magma mixing in the explosive 2007-2008 eruption of Oldoinyo Lengai, Tanzania	Sonja A. Bosshard, Hannes B. Mattsson	Sonja A. Bosshard
July 23 Poster	3W_3F-P3	Characteristics of tephra from the initial stages of the eruption of Cordón Caulle Volcanic Complex eruption (Southern Andes), June 2011	Elizabeth I. Rovere, I Lia Botto, Maria E. Canafoglia, Other	Elizabeth I. Rovere
July 23 Poster	3W_3F-P4	Mafic minerals compositions as a useful tool for the identification of source volcano of weathered fallout deposits - a case study of the middle Pleistocene tephra beds in central Japan -	Yoshihiro Takeshita	Yoshihiro Takeshita
July 23 Poster	3W_3F-P5	Effects of vertical diffusivity of particles on distribution of deposits calculated by the tephra-tracking model PUFF	Koji Kiyosugi, Takehiro Koyaguchi, Yujiro J Suzuki	Koji Kiyosugi
July 23 Poster	3W_3F-P6	Sub-plinian fall deposits and their grain size distribution of January 2011 eruption from Shinmoedake Volcano, Kirishima Volcanic Group, South Kyushu, Japan	Ryuta Furukawa, Nobuo Geshi, Shun Nakano, Other	Ryuta Furukawa
July 23 Poster	3W_3F-P7	Vesiculation and fragmentation in silicic subaerial and submarine magmas: insights from case studies in the Kermadec arc	Melissa D Rotella, Colin JN Wilson, Simon J Barker, Other	Melissa D Rotella
July 23 Poster	3W_3F-P8	Quantification of tephra deposits from Tungurahua 2011 - 2013 eruption, Ecuador: implication on the evolution of a long-lasting eruption	Benjamin Bernard, Bridget Wade, Silvana Hidalgo, Other	Benjamin Bernard
July 23 Poster	3W_3F-P9	Multi-vent/lobe tephra deposition from the 1256 Al-Madinah eruption, Saudi Arabia	Emily Kawabata, Mark S Bebbington, Shane J Cronin, Other	Emily Kawabata
July 23 Poster	3W_3F-P10	Transport of pyroclastic particles from 1959 Kilauea Iki eruption in Hawaii	Kae Tsunematsu, Bruce Houghton, Sarah Fagents, Other	Kae Tsunematsu
July 23 Poster	3W_3F-P11	Numerical simulations of atmospheric tephra dispersal at mesoscale - implications for assessment of total erupted mass from the December 2006 and 2009 explosive events at Bezymianny Volcano, Kamchatka	Konstantin B. Moiseenko, Natalia A. Malik	Konstantin B. Moiseenko
July 23 Poster	3W_3F-P12	SOURCE DYNAMICS OF PULSATORY ERUPTIONS	Dominguez Lucia, Laura Pioli, Costanza Bonadonna, Other	Dominguez Lucia
July 23 Poster	3W_3F-P13	Constraining tephra dispersion and deposition from cyclic subplinian explosions at Shinmoedake volcano, Kyushu, Japan, 2011	Fukashi Maeno, Masashi Nagai, Setsuya Nakada, Other	Fukashi Maeno
July 23 Poster	3W_3F-P14	Stratigraphy of 2010 merapi eruption in comparison to previous large deposits	Supriyati D Andreastuti, John S Pallister, Subandriyo, Other	Supriyati D Andreastuti
July 23 Poster	3W_3F-P15	Re-examination of the widespread correlation of Middle Pleistocene tephra in Japan: a co-ignimbrite Ks18 tephra in central Japan and the Shimokado pyroclastic flow deposits, south Kyusyu	Fumikatsu Nishizawa, Takehiko Suzuki	Fumikatsu Nishizawa
July 23 Poster	3W_3F-P16	Correlating multiple tephra records with heuristic matching	Rebecca M Green, Mark S Bebbington, Shane J Cronin, Other	Rebecca M Green
July 23 Poster	3W_3F-P17	Distribution and character of the 2011 Shinmoedake eruption deposits at Kirishima Volcano, Japan	Yasuo Miyabuchi, Daisuke Hanada, Hiroshi Niimi, Other	Yasuo Miyabuchi
July 23 Poster	3W_3F-P18	Volume estimation of single vulcanian eruption during the activity of Showa crater, Sakurajima Volcano, Japan	Masayuki Oishi, Kuniaki Nishiki, Nobuo Geshi, Other	Masayuki Oishi
July 23 Poster	3W_3F-P19	Late Quaternary tephrostratigraphy of the East Asia: implications for the eruptive histories of Baegdusan and Ulleung volcanoes.	Chungwan Lim, Kazuhiro Toyoda, Ken Ikehara, Other	Insung Lee
July 23 Poster	3W_3F-P20	Geochemical correlation of marine tephra from Sulu to proximal deposits of active volcanoes in the Philippines	Catherine C Lit, Maria Luisa G Tejada, Sandra G Catane	Catherine C Lit
3G. Observation, theory and experiments on volcanogenic particulate mass flows and their deposits				
Poster Presentation July 23 Core Time (13:30-15:00)				
July 23 Poster	3W_3G-P1	What happens when a pyroclastic flow enters the water - numerical modelling of an offshore pyroclastic turbidite	Pete Rowley, Dave Waltham, Andrew J Hogg, Other	Pete Rowley
July 23 Poster	3W_3G-P2	The AD 536 Phreatoplinian eruption of Volcán Ilopango, El Salvador: physical character of ash-rich pyroclastic-density-current deposits and coeval ash aggregates	Richard J Brown, James W Vallance, Bruce F Houghton, Other	Richard J Brown
July 23 Poster	3W_3G-P3	Motion and remanent magnetization of particles in eruption-fed density currents: Late Eocene scoria deposits, Oga Peninsula, NE Japan	Kazuhiko Kano, Yudai Sato, Shotaro Akaho, Other	Kazuhiko Kano

July 23 Poster	3W_3G-P4	Forming mechanism of Taiheizan pyroclastic flow: Block and ash flow generated from eruption column collapse	Shun Orui, Kazuhito Yamasaki, Keiko Suzuki	Keiko Suzuki
July 23 Poster	3W_3G-P5	Emplacement processes and provenance of submarine volcanoclastic deposits (IODP Site C0011, Nankai Trough)	Julie C Schindlbeck, Steffen Kutterolf, Armin Freundt	Julie C Schindlbeck
July 23 Poster	3W_3G-P6	Occurrence of the Take tephra distributed in the northern flank of Kitadake, Sakurajima Volcano, Japan	Hiroto Hiramane, Yasuo Miyabuchi, Tetsuo Kobayashi	Hiroto Hiramane
July 23 Poster	3W_3G-P7	A benchmarking exercise to promote inter-comparison for numerical models of pyroclastic density currents	Sylvain J Charbonnier, Domenico Doronzo, Tomaso Esposti Ongaro	Sylvain J Charbonnier
July 23 Poster	3W_3G-P8	Taisho lahar as a cohesive lahar in 1926 eruption of Tokachidake Volcano, Central Hokkaido, Japan: Implications for generating mechanism of cohesive lahars	Shimpei Uesawa	Shimpei Uesawa
July 23 Poster	3W_3G-P9	Change in components of lahar deposits from Chokai volcano	Yusuke Minami, Tsukasa Ohba, Shintaro Hayashi, Other	Yusuke Minami
July 23 Poster	3W_3G-P10	Lahar characteristics and erosion measurements using multiparameter recording stations and DEMs in the Gendol catchment after the 2010 Merapi eruption	Jean-Claude Thouret, Akhmad Solikhin, Sandy Budi Wibowo, Other	Akhmad Solikhin
July 23 Poster	3W_3G-P11	Prediction of Lahar Inundation Area for Volcanic Eruption of Baegdusan using LAHARZ	Sanghyun Kim, Taebok Song, Hyunjun Kim, Other	Sanghyun Kim
July 23 Poster	3W_3G-P12	Development of Multiparameter Telemetry System for Monitoring and Early Warning Lahar at Merapi Volcano, Java, Indonesia	Made Agung Nandaka, Sulis Tiyani, Anton Sulistio, Other	Made Agung Nandaka
July 23 Poster	3W_3G-P13	Depositional processes of the Kuner ignimbrite from the Cubukludag graben, western Turkey: implications for generation of the phreatomagmatic eruptions triggered by dome emplacement	Zekiye Karacik, S Can Genc	Zekiye Karacik
July 23 Poster	3W_3G-P14	Ground Penetrating Radar (GPR) survey on volcanogenic outburst flood deposits, northeast Japan	Kyoko S. Kataoka, Christopher Gomez	Kyoko S. Kataoka
July 23 Poster	3W_3G-P15	Alternating subaerial pyroclastic and marine reworking processes during eruption of a coastal tuff ring, Jeju Island, Korea: A high-resolution record of Holocene sea-level	Woo Seok Yoon, Gi Bom Kim, Seok Hoon Yoon, Other	Woo Seok Yoon
July 23 Poster	3W_3G-P16	The thermal state of pyroclastic flow deposits, 4.6 ka Fogo A plinian sequence, São Miguel, Azores, using TRM analysis and charcoal reflectance data: implications for eruption and flow processes	Alessandra Pensa, Raymond Cas, Guido Giordano, Other	Alessandra Pensa
July 23 Poster	3W_3G-P17	The 3640-3510 BC eruption of Chachimbiro volcanic complex, Ecuador: a violent directed blast produced by a satellite dome	Benjamin Bernard, Claude Robin, Silvana Hidalgo, Other	Benjamin Bernard
July 23 Poster	3W_3G-P18	Valley-filling ignimbrites and the incursion of a pyroclastic density current into a lake: the Stallachan Dubha Ignimbrite Member, Ardnamurchan, NW Scotland	David Brown, Charlotte McLean, John Buchanan, Other	David Brown
July 23 Poster	3W_3G-P19	Proximal pyroclastic density current deposits at a glaciated composite volcano: Mount Ruapehu, New Zealand	James D Cowlyn, Ben M Kennedy, Darren M Gravley, Other	James D Cowlyn
July 23 Poster	3W_3G-P20	Emplacement time interval and temperature estimation for the Agatsuma pyroclastic flow, Asama-Maekake volcano, central Japan.	Tatsuo Kanamaru, Kuniyuki Furukawa, Yuki Shimizu	Tatsuo Kanamaru
July 23 Poster	3W_3G-P21	Field evidence for substrate entrainment by pyroclastic density currents and its effect on downstream dynamics at Mount St Helens, Washington (USA)	Nicholas M Pollock, Brittany D Brand	Nicholas M Pollock
July 23 Poster	3W_3G-P22	Rock-magnetic evidence for the low-temperature emplacement of the Habushiura pyroclastic density current, Niiijima Island, Japan	Reina Nakaoka, Keiko Suzuki-Kamata	Reina Nakaoka
July 23 Poster	3W_3G-P23	Size-segregation, self-channelization and enhanced runout of bidisperse granular avalanches	Mark J Woodhouse, David Soper, Christopher G Johnson, Other	Mark J Woodhouse
July 23 Poster	3W_3G-P24	Pyroclastic gas escape structures	Jack Holt, Tim Kluge, Mark A Gilbertson, Other	Alison C Rust
July 23 Poster	3W_3G-P25	Supra-Ignimbrite Channel-Fill Sedimentation of the Towada-Hachinohe (15Ka) Tephra Produced from the Towada Caldera, NE Japan	Kotaro Kamada	Kotaro Kamada

4B. Environmental and ecosystem impacts of persistent volcanic degassing and recent eruptions

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_4B-P1	Origin of the pumiceous deposits of the Kikai-Akahoya eruption in Yakushima Island, SW Japan	Mitsuru Okuno, Nobuo Geshi, Hideto Naruo, Other	Mitsuru Okuno
July 23 Poster	3W_4B-P2	Hydrochemical processes and environmental isotope study of groundwaters around Lake Nyos (North-western Cameroon)	B. K. Tchakam, Y. W. Fantong, K. Anazawa, Other	B. K. Tchakam
July 23 Poster	3W_4B-P3	Complex ash leachate compositions of the 6 August 2012 Mt. Tongariro (Te Maari) eruption, New Zealand, and implications for volcanic health hazard evaluation	Anke V Zernack, Shane J Cronin, Marco Brenna, Other	Anke V Zernack

4C. Forecasting volcanic hazards I

Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_4C-P1	Space-time Analysis of Volcanic Eruptions and Disasters in Japan for the Past 2,000 Years	Yoichi Nakamura, Yuhtaro Ito, Masato Tazawa, Other	Yoichi Nakamura
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July 23 Poster	3W_4C-P2	How Many Explosive Eruptions are Missing from the Geologic Record? Analysis of the Quaternary Record of Large Magnitude Explosive Eruptions in Japan.	Koji Kiyosugi, Charles B Connor, Stephen Sparks, Other	Koji Kiyosugi
July 23 Poster	3W_4C-P3	An operational approach to generate and visualize Bayesian probabilistic volcanic hazard curves and maps by means of BET_VH tool	Roberto Tonini, Laura Sandri, Jacopo Selva, Other	Roberto Tonini
July 23 Poster	3W_4C-P4	HASSET: A probability event tree tool to evaluate future eruptive scenarios based on bayesian inference. Presented as a plugin for qgis	Rosa Sobradelo, Rosa Sobradelo, Stefania Bartolini, Other	Rosa Sobradelo
July 23 Poster	3W_4C-P5	How to cope with volcano flank dynamics? a conceptual model behind possible scenarios for Mt. Etna	Valerio Acocella, Giuseppe Puglisi	Valerio Acocella
July 23 Poster	3W_4C-P6	Analyzing hazard vulnerability in Mt. Baekdusan area using terrain factors	Sung-Wook Kim, Eun-Kyeong Choi, In-Soo Kim, Other	Sung-Wook Kim
July 23 Poster	3W_4C-P7	New empirical approach to estimate proximal volcanic hazard zones	Gabriel Orozco, Alvaro Amigo, Daniel Bertin, Other	Gabriel Orozco
July 23 Poster	3W_4C-P8	Sensitivity study of numerical weather-model parameters for quantitatively estimating ash concentration in the atmospheric surface layer with a computational ash dispersion model, FALL3D	Yasuo Hattori, Hitoshi Suto, Yumiko Go, Other	Yasuo Hattori
July 23 Poster	3W_4C-P9	GIS-based tool for long-term risk management of civil aviation during explosive volcanic eruptions	Chiara Scaini, Arnau Folch	Chiara Scaini
July 23 Poster	3W_4C-P10	A thermal anomaly as a precursor for predictions of strong explosive volcanic eruptions	Olga A. Girina	Olga A. Girina
July 23 Poster	3W_4C-P11	Precursory eruptions of the 2011 Shinmoedake eruptions, Kirishima volcanoes	Yasuhisa Tajima, Masaaki Tsutsui, Masashi Nagai, Other	Yasuhisa Tajima
July 23 Poster	3W_4C-P12	Seismic Precursors to Eruptions at Volcanoes in Extensional Stress Fields	Richard Wall, Christopher Kilburn, Philip Meredith, Other	Richard Wall
July 23 Poster	3W_4C-P13	The base method for prediction of volcanic activity	Alexander Iv. Malyshev	Alexander Iv. Malyshev

4G. Recent eruption impacts and mitigation - a focus on both infrastructure and community volcanic hazard management Poster Presentation July 23 Core Time (13:30-15:00)

July 23 Poster	3W_4G-P1	Assessing Volcanic Hazards using VHub online tools: El Salvador Volcanoes Case Study	Jorge V Bajo Sanchez, Bettina Martinez-Hackert, Eduardo Gutierrez Flores, Other	Jorge V Bajo Sanchez
July 23 Poster	3W_4G-P2	Historic activity and new volcanic unrest: Turrialba volcano, Costa Rica.	Gino Gonzalez, Raul Mora-Amador, Carlos Ramirez, Other	Gino Gonzalez
July 23 Poster	3W_4G-P3	Exchange of probabilistic volcanic hazard information between scientists and civil authorities: insights into the influence of communication format	Mary Anne Thompson, Jan Lindsay, Gill Jolly, Other	Mary Anne Thompson
July 23 Poster	3W_4G-P4	Methods to communicate volcanic hazards information to indigenous cultures: a case study of Maori from New Zealand.	Jonathan Procter, Hannah Rainforth, Tai Black, Other	Jonathan Procter
July 23 Poster	3W_4G-P5	Volcanic activity and environment: Impacts on agriculture and use of geological data to improve recovery processes	Sylviane L.G. Lebon, Freysteinn Sigmundsson, Sigurdur R. Gislason	Sylviane L.G. Lebon
July 23 Poster	3W_4G-P6	Sequence of the 1822 AD Eruption and Management for Hazard Mitigation of Usu Volcano, Hokkaido, Japan	Masashi Tsukui	Masashi Tsukui
July 23 Poster	3W_4G-P7	Volcanoes on borders: Potentially explosive geopolitical agents	Amy R Donovan, Clive Oppenheimer	Amy R Donovan

PROGRAM

July 24, AM

Date/Time	No.	Title	Authors	Presenter
3E. Volcanic plume dynamics				
Oral Presentation July 24 AM1 (8:45-10:30) Room A1				
Chair: Costanza Bonadonna, Arnau Folch, Raffaello Cioni				
July 24 8:45-9:00	4A1_3E-O1 Invited	Inversion of field data for reconstructing plume dynamics of past eruptions: state of the art and perspectives	Roberto Sulpizio	Roberto Sulpizio
July 24 9:00-9:15	4A1_3E-O2	Unsteady turbulent jet dynamics with implications for volcanic plumes	Kirsten N. Chojnicki, Amanda B. Clarke, Ronald J. Adrian, Other	Kirsten N. Chojnicki
July 24 9:15-9:30	4A1_3E-O3	Buoyancy of plume-sourced ash clouds: implications for ash transport modelling.	Stephen RJ Sparks, Peter Baines, Rose Burden, Other	Stephen RJ Sparks
July 24 9:30-9:45	4A1_3E-O4	Quantifying the uncertainty in estimation of the volcanic source mass flux from observed plume dynamics	Jeremy C Phillips, Mark J Woodhouse, Andrew J Hogg, Other	Jeremy C Phillips
July 24 9:45-10:00	4A1_3E-O5	Integral models of volcanic plumes in a cross wind.	Mark J Woodhouse, Andrew J Hogg, Jeremy C Phillips, Other	Mark J Woodhouse
July 24 10:00-10:15	4A1_3E-O6	Impact of wind on the condition for column collapse of volcanic plumes	Wim Degruyter, Costanza Bonadonna	Wim Degruyter
July 24 10:15-10:30	4A1_3E-O7	A fast Eulerian multiphase flow model for the three-dimensional numerical simulation of non-equilibrium effects in turbulent volcanic plumes	Matteo Cerminara, Tomaso Esposti Ongaro, Maria Vittoria Salvetti, Other	Matteo Cerminara

3E. Volcanic plume dynamics**Oral Presentation July 24 AM2 (10:45-12:30) Room A1****Chair: Costanza Bonadonna, Arnau Folch, Raffaello Cioni**

July 24 10:45-11:00	4A2_3E-O8	Do Prince Ruperts Drops provide insight into phreatomagmatic fragmentation?	Katharine V Cashman, Alison C Rust, Emma J Nicholson	Katharine V Cashman
July 24 11:00-11:15	4A2_3E-O9	A new model for the predication of drag of non-spherical volcanic particles	Gholamhossein Bagheri, Costanza Bonadonna, Irene Manzella, Other	Gholamhossein Bagheri
July 24 11:15-11:30	4A2_3E-O10	Determination and evolution of source parameters in volcanic eruptions; the FUTUREVOLC supersite approach	Magnus T Gudmundsson, Halldor Bjornsson, Maurizio Ripepe, Other	Magnus T Gudmundsson
July 24 11:30-11:45	4A2_3E-O11	Full bandwidth remote sensing for total parameterization of volcanic plumes	Sebastien Valade, Andrew Harris, Georgina Sawyer, Other	Sebastien Valade
July 24 11:45-12:00	4A2_3E-O12	Eruptions on the fast track, part b): The variability of strombolian explosions from high speed thermal and optical videos	Damien Gaudin, Jacopo Taddeucci, Piergiorgio Scarlato, Other	Damien Gaudin
July 24 12:00-12:15	4A2_3E-O13	Using infrasound to infer volcanic jet parameters: revisiting acoustic power vs. jet velocity scaling laws	Robin S Matoza, David Fee, Kent L Gee, Other	Robin S Matoza
July 24 12:15-12:30	4A2_3E-O14	Infrasonic Crackle from the 2011 Eruption of Nabro Volcano, Eritrea: Evidence for Supersonic Jet Noise	David Fee, Robin Matoza, Kent Gee, Other	David Fee

2C. High-level volcano monitoring and data interpretation**Oral Presentation July 24 AM1 (8:45-10:30) Room A2****Chair: Eleonora Rivalta, Kyle Anderson, Luca Crescentini**

July 24 8:45-9:00	4A1_2C-O1	Can we isolate deformation due to tectonic and volcanic origin? - New results from deformation monitoring at Mayon volcano, a collaborative project EOS-PHIVOLCS	Dannie Hidayat, Eduardo Laguerta, Ramses Valerio, Other	Dannie Hidayat
July 24 9:00-9:15	4A1_2C-O2	Spatial and temporal tilt maxima of an ascending Mogi source	Martin Hensch, Torsten Dahm, Matthias Hort	Martin Hensch
July 24 9:15-9:30	4A1_2C-O3	Can InSAR contribute to volcano early warning systems?	Nicolas d Oreye, Alicia Arjona, Sergey Samsonov, Other	Nicolas d Oreye
July 24 9:30-9:45	4A1_2C-O4	Deformation sources at a divergent plate boundary: interplay between volcano deformation, geothermal processes, and plate spreading in the Northern Volcanic Zone, Iceland.	Vincent Drouin, Karsten Spaans, Sigrun Hreinsdottir, Other	Vincent Drouin
July 24 9:45-10:00	4A1_2C-O5	Investigating the source mechanisms of deflation-inflation events at Kilauea Volcano, Hawai'i	Jessica H Johnson, Kyle R Anderson, Michael P Poland, Other	Jessica H Johnson
July 24 10:00-10:15	4A1_2C-O6	Monitoring recent geodynamical activity at Campi Flegrei, Italy	Roberto Scarpa, Francesca Bianco, Paolo Capuano, Other	Roberto Scarpa
July 24 10:15-10:30	4A1_2C-O7	The 2009-2013 uplift at Campi Flegrei caldera, Italy: does continuous GPS monitoring demand a predominant source different from that of the major 1982-1984 unrest?	Antonella Amoroso, Luca Crescentini, Prospero De Martino, Other	Antonella Amoroso

2C. High-level volcano monitoring and data interpretation**Oral Presentation July 24 AM2 (10:45-12:30) Room A2****Chair: Takao Ohminato, Giuseppe Puglisi, Robin Matoza**

July 24 10:45-11:00	4A2_2C-O8 Invited	Physics-based modeling at Kilauea Volcano, Hawai'i: Constraining magma supply and storage rates, primary melt volatile content, and reservoir volume	Kyle Anderson, Michael Poland	Kyle Anderson
July 24 11:00-11:15	4A2_2C-O9	Absolute gravity variation at Sakurajima volcano from April 2009 through January 2011 and its relevance to the eruptive activity of Showa crater	Shuhei Okubo, Takahito Kazama, Keigo Yamamoto, Other	Shuhei Okubo
July 24 11:15-11:30	4A2_2C-O10	Insights into the cyclic eruptive behavior of Mount Etna during 2011: geophysical and geochemical constraints	Domenico Patane, Alessandro Aiuppa, Marco Aloisi, Other	Domenico Patane
July 24 11:30-11:45	4A2_2C-O11	How do volcanic rift zones relate to flank instability? Evidence from collapsing rift at Etna and its relationship with the nearby Pernicana Fault System	Joel Ruch, Susi Pepe, Francesco Casu, Other	Joel Ruch
July 24 11:45-12:00	4A2_2C-O12 Invited	Linking geodesy and petrology - The influence of cooling, crystallisation and re-melting on the interpretation of geodetic signals	Luca Caricchi, Juliet Biggs, Catherine Annen, Other	Luca Caricchi
July 24 12:00-12:15	4A2_2C-O13	Active monitoring at Active Volcano - Performance of ACROSS at Sakurajima volcano, Japan.	Koshun Yamaoka, Hiroki Miyamachi, Masato Iguchi, Other	Koshun Yamaoka
July 24 12:15-12:30	4A2_2C-O14	The BENTO Box: Development and field-testing of a new satellite-linked data collection system for volcano monitoring	Diana C. Roman, Alberto Behar, Matthew J. Fouch, Other	Diana C. Roman

2E. Remote sensing and terrain modelling**Oral Presentation July 24 AM1 (8:45-10:30) Room A3****Chair: Simon Carn, Andrew Tupper, David Pieri**

July 24 8:45-9:00	4A1_2E-O8	Volcanic eruption clouds in southwest Japan observed from the ground and satellites	Kisei Kinoshita, Naoko Iino, Chikara Kanagaki, Other	Kisei KINOSHITA
July 24 9:00-9:15	4A1_2E-O9	Tracking of Rock fall and Pyroclastic Flow Events using Infrasound Arrays at Volcan Santiaguito, Guatemala	Brian R TerBush, Jeffrey B Johnson	Brian R TerBush
July 24 9:15-9:30	4A1_2E-O10	Monitoring the 3D structure of diffuse volcanic ash clouds : a case study after the 2011 Puyehue-Cordon Caulle Eruption	J.-P. Vernier, T. D. Fairlie, J. J. Murray, Other	J.-P. Vernier

July 24 9:30-9:45	4A1_2E-O11	Measurement of Plume Growth Rate From Satellite Imagery for ESP Estimation	Solene Pouget, Marcus I Bursik, Peter W Webley, Other	Solene Pouget
July 24 9:45-10:00	4A1_2E-O12	Eruption of Nabro volcano, 2011: Evidence for early injection of sulfate into the stratosphere	Marloes Penning de Vries, Steffen Doerner, Christoph Hoermann, Other	Christoph Hoermann
July 24 10:00-10:15	4A1_2E-O13	Direct airborne in-situ aerosols measurements of the Mt. Sakurajima eruption plume and remote sensing plume tracking	Andreas Vogel, Jonas Eliasson, Konradin Weber, Other	Andreas Vogel
July 24 10:15-10:30	4A1_2E-O14	Operational challenges in Volcanic Ash Advisory Centre remote sensing	Emile Jansons, Andrew Tupper, Cyndee Seals	Emile Jansons

2E. Remote sensing and terrain modelling

Oral Presentation July 24 AM2 (10:45-12:30) Room A3

Chair: Simon Carn, Fred Prata, Andrew Tupper

July 24 10:45-11:00	4A2_2E-O15	Global and regional patterns of volcanic deformation.	Juliet Biggs, Susanna Ebmeier, Tamsin Mather	Juliet Biggs
July 24 11:00-11:15	4A2_2E-O16	Deformation on the lava surface within the crater at Kirishima, Shinmoe-dake volcano, detected by InSAR and PSInSAR	Yousuke Miyagi, Taku Ozawa, Tomofumi Kozono, Other	Yousuke Miyagi
July 24 11:15-11:30	4A2_2E-O17	Monitoring and Modeling the Surface Deformation around Mud Volcano of Sidoarjo, East Java, Indonesia	Hasanuddin Z. Abidin, Heri Andreas, Masyhur Irsyam, Other	Hasanuddin Z. Abidin
July 24 11:30-11:45	4A2_2E-O18	Effects and extent of pyroclastic and lahar deposits of the 2010 Merapi eruption in one active catchment analyzed from HSR imagery	Akhmad Solikhin, Jean-Claude Thouret, Jean-François Oehler, Other	Akhmad Solikhin
July 24 11:45-12:00	4A2_2E-O19	HotVolc: A satellite-data-driven Web Map Service for real-time monitoring of active volcanoes	Judicael Decriem, Mathieu Gouhier, Philippe Labazuy, Other	Judicael Decriem
July 24 12:00-12:15	4A2_2E-O20	Pulsating Magma Output Detected by Helicopter Thermal Surveys: the 2011-2012 El Hierro Submarine Eruption Test Case, Canary Islands	Pedro A Hernandez, Sonia Calvari, Nemesio M Perez, Other	Pedro A Hernandez
July 24 12:15-12:30	4A2_2E-O21	Active submarine volcano monitoring with satellite optical sensors	Minoru Urai	Minoru Urai

3I. Active crater lakes

Oral Presentation July 24 AM1 (8:45-10:30) Room A4

Chair: Jean Vandemeulebrouck, Akihiko Terada

July 24 8:45-9:00	4A1_3I-O1 Invited	Volcanic lakes: the more you know, the less you need	Dmitri Rouwet	Dmitri Rouwet
July 24 9:00-9:15	4A1_3I-O2	The Nyos Organ Pipes program: Lake Monoun has been completely degassed and Lake Nyos will be safe within five years	Halbwachs Michel	Halbwachs Michel
July 24 9:15-9:30	4A1_3I-O3	Chemical structure of Lakes Nyos and Monoun, Cameroon	T Ohba, Y Sasaki, M Kusakabe, Other	T Ohba
July 24 9:30-9:45	4A1_3I-O4	Estimation of vertical profile of dissolved CO ₂ concentration in Cameroonian volcanic lakes using sound velocity of lake water	Kazuto Saiki, Mitsuhsa Sanemasa, Katsuya Kaneko, Other	Kazuto Saiki
July 24 9:45-10:00	4A1_3I-O5	High CO ₂ enrichment in surface waters of MCL lake at Taal volcano, Philippines	Alain Bernard, Katharine Maussen, Opet Villacorte, Other	Alain Bernard
July 24 10:00-10:15	4A1_3I-O6	Pinatubo lake chemistry and degassing 1991-2010	Florian M Schwandner, M. Carmencita Arpa, Bruce W Christenson, Other	Florian M Schwandner
July 24 10:15-10:30	4A1_3I-O7	Surface and ground water chemistry in the vicinity of Lake Nyos	Katsuro Anazawa, Wilson Y Fantong, Akira Ueda, Other	Katsuro Anazawa

3I. Active crater lakes

Oral Presentation July 24 AM2 (10:45-12:30) Room A4

Chair: Takeshi Ohba, Katsuro Anazawa

July 24 10:45-11:00	4A2_3I-O8 Invited	Ruapehu Crater Lake: Latest developments of a long temperature record	Tony Hurst, Bruce Christenson	Tony Hurst
July 24 11:00-11:15	4A2_3I-O9	Hydrological evolution and chemical structure of a hyper-acidic spring-lake system at White Island, NZ	Bruce W Christenson, Karen Britten, Agnes Mazot, Other	Bruce W Christenson
July 24 11:15-11:30	4A2_3I-O10	Monitoring magmatic-hydrothermal activity with rare earth elements in crater lakes	Manfred J van Bergen, Maria Martinez, Georgina Ayres	Manfred J van Bergen
July 24 11:30-11:45	4A2_3I-O11	Thermal and chemical changes in the crater lake of Copahue volcano (Argentina) prior to the December 2012 phreatomagmatic eruption.	Mariano Augusto, Franco Tassi, Alberto Caselli, Other	Mariano Augusto
July 24 11:45-12:00	4A2_3I-O12	The factors that control the long-term sustainability of a hot crater lake: Insights from a generic numerical model	Akihiko Terada, Takeshi Hashimoto	Akihiko Terada
July 24 12:00-12:15	4A2_3I-O13	Temperature stratification and geothermal heat flux into deep caldera lakes Shikotsu, Kuttara, Tazawa and Towada	Bertram Boehrer, Ryuji Fukuyama, Kazuhisa A. Chikita	Bertram Boehrer
July 24 12:15-12:30	4A2_3I-O14	Biogeochemical processes involving dissolved CO ₂ and CH ₄ at Albano, Averno, and Monticchio meromictic volcanic lakes (Central-Southern Italy)	Jacopo Cabassi, Franco Tassi, Orlando Vaselli, Other	Jacopo Cabassi

2I. Open system volcanoes

Oral Presentation July 24 AM1 (8:45-10:30) Room A5

Chair: Kathy Cashman

July 24 8:45-9:10	4A1_2I-O1 Invited	Erebus volcano: an open-vent archetype	Mount Erebus Volcano Observatory	Mount Erebus Volcano Observatory
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July 24 9:10-9:25	4A1_2I-O2	Zonation in anorthoclase feldspar megacrystals reveals dynamics of the magma conduit feeding the lava lake at Erebus volcano, Antarctica	Yves Moussallam, Clive Oppenheimer, Bruno Scaillet, Other	Yves Moussallam
July 24 9:25-9:40	4A1_2I-O3	Tracking the hydraulic connection between Kilauea's summit and rift zones using lava level	Matthew Patrick, Tim Orr	Matthew Patrick
July 24 9:40-9:55	4A1_2I-O4	Estimating the location and volume of shallow magma storage at Kilauea Volcano from observations of episodic ground deformation	Kyle Anderson, Jessica Johnson, Michael Poland, Other	Kyle Anderson
July 24 9:55-10:10	4A1_2I-O5	Componentry of pyroclastic fall deposits from September and October 2008 weak explosions at Kilauea summit crater: insights into the dynamics of an open basaltic magma column	Julia Eychenne, Bruce Houghton, Don Swanson, Other	Julia Eychenne
July 24 10:10-10:25	4A1_2I-O6	An analysis of volcano inflation prior to an eruption at Stromboli volcano based on slug flow and rising gas bubble models	Ryohei Kawaguchi, Takeshi Nishimura	Ryohei Kawaguchi

2I. Open system volcanoes

Oral Presentation July 24 AM2 (10:45-12:30) Room A5

Chair: A. Rust

July 24 10:45-11:00	4A2_2I-O7	Can passive degassing induce volcanic crisis?	Társilo Girona, Fidel Costa, Chris Newhall	Társilo Girona
July 24 11:00-11:15	4A2_2I-O8	The opening of vents like decompression valves of the hydrothermal system at Turrialba volcano, Costa Rica	Geoffroy Avar, Javier Pacheco, Maria Martinez, Other	Geoffroy Avar
July 24 11:15-11:30	4A2_2I-O9	Open-system submarine volcanoes: dynamics and phase state	Richard Henley, Richard Arculus, Cornel de Ronde	Richard Henley
July 24 11:30-11:45	4A2_2I-O10	SO ₂ camera measurements at Popocatepetl Volcano (Mexico). Insights into the dynamics of an atypical open vent volcano	Robin Campion, Matthias Fickel, Lucio Cardenas, Other	Robin Campion
July 24 11:45-12:00	4A2_2I-O11	Open and closed system eruptive dynamics at Tungurahua volcano constrained by SO ₂ emission rate and seismo-acoustic intensity measurements	Silvana Hidalgo, Jean Battaglia, Alexander L. Steele, Other	Silvana Hidalgo
July 24 12:00-12:15	4A2_2I-O12	Degassing of Erebus lava lake, Antarctica	Tehnuka Ilanko, Clive Oppenheimer, Alain Burgisser, Other	Tehnuka Ilanko
July 24 12:15-12:30	4A2_2I-O13	Gas-driven lava lake fluctuations at Erta 'Ale volcano (Ethiopia) revealed by MODIS measurements	Emmanuella Bouche, Sylvie Vergnolle	Sylvie Vergnolle

4D. Forecasting volcanic hazards II

Oral Presentation July 24 AM1 (8:45-10:30) Room A6

Chair: John Eichelberger, Stephen Tait, Hiroaki Takahashi

July 24 8:45-9:00	4A1_4D-O1 Invited	Long-term forecast of eruptions from Mono-Inyo volcanic chain, CA, USA	Marcus Bursik, Galina Rogova, Solene Pouget, Other	Marcus Bursik
July 24 9:00-9:15	4A1_4D-O2	A multi-scale risk assessment for tephra fallout and airborne concentration from multiple Icelandic volcanoes - Part I: hazard assessment	Sebastien Biass, Chiara Scaini, Costanza Bonadonna, Other	Sebastien Biass
July 24 9:15-9:30	4A1_4D-O3	A multi-scale risk assessment for tephra fallout and airborne concentration from multiple Icelandic volcanoes - Part II: vulnerability and impact assessment	Chiara Scaini, Sebastien Biass, Adriana Galderisi, Other	Chiara Scaini
July 24 9:30-9:45	4A1_4D-O4	MODELING FOR THE DISTRIBUTION OF PYROCLASTIC FLOW MERAPI VOLCANO USING TITAN2D AND LIDAR DIGITAL ELEVATION MODEL	Nurnaning Aisyah, Christina Widiwijayanti, Subandriyo, Other	Nurnaning Aisyah
July 24 9:45-10:00	4A1_4D-O5	The VORISA project: A novel approach to assessing long-term volcanic hazard in the Kingdom of Saudi Arabia	Mohammed R Moufti, Jan M Lindsay	Jan M Lindsay
July 24 10:00-10:15	4A1_4D-O6	Re-evaluation for the Impact of a Gigantic Eruption from Ilopango Caldera, El Salvador, Central America, in the 3rd to 6th Centuries	Shigeru Kitamura	Shigeru Kitamura
July 24 10:15-10:30	4A1_4D-O7	TOPAZ: Long-term volcanic risk forecasting for deep geological repositories for radioactive waste	Ellie Scourse, Chuck Connor, Olivier Jaquet, Other	Ellie Scourse

4D. Forecasting volcanic hazards II

Oral Presentation July 24 AM2 (10:45-12:30) Room A6

Chair: Evgeny Gordeev, Shinji Takarada, Yujiro Suzuki

July 24 10:45-11:00	4A2_4D-O8 Invited	Quantitative modelling of disaster risk at La Soufriere, Guadeloupe	Susanna Jenkins, Peter Baxter, Robin Spence, Other	Susanna Jenkins
July 24 11:00-11:15	4A2_4D-O9	Towards a global volcanic hazards index	Melanie R Auker, Steve Sparks, Susanna Jenkins, Other	Melanie R Auker
July 24 11:15-11:30	4A2_4D-O10	Long-term eruption forecasting at Ischia volcano	Laura Sandri, Lucia Zaccarelli, Sandro de Vita, Other	Laura Sandri
July 24 11:30-11:45	4A2_4D-O11	Tephrostratigraphy Concerning Resedimentation of Tephra	Tomohiro Tsuji, Michiharu Ikeda, Akira Furusawa, Other	Tomohiro Tsuji
July 24 11:45-12:00	4A2_4D-O12	The development of structures and morphology in analog debris avalanches: Implications for natural examples	Engielle Mae R Paguican, Benjamin van Wyk de Vries, Pablo Grosse, Other	Engielle Mae R Paguican
July 24 12:00-12:15	4A2_4D-O13	Estimate of mass flow in gas plumes from the 2010-2012 eruptions of Gorely Volcano, Kamchatka	Evgeny I Gordeev, Valery V Droznin, Irina K Dubrovskaya	Evgeny I Gordeev
July 24 12:15-12:30	4A2_4D-O14	Geochemical precursors for eruption repose length	Rebecca M Green, Mark S Bebbington, Shane J Cronin, Other	Rebecca M Green

1D. Insights into magma chamber processes and volcanic forecasting from combined petrological and timescale information				
Oral Presentation July 24 AM1 (8:45-10:30) Room B1				
Chair: Heather Handley, Shane Cronin, Ian Smith, Simon Turner				
July 24 8:45-9:00	4A1_1D-O1 Invited	Radiometric constraints on timescales of degassing and crystallization for lavas from arcs, ridges, rifts, and ocean islands	Mark K Reagan	Mark K Reagan
July 24 9:00-9:15	4A1_1D-O2 Invited	Are high magma supply mid-ocean ridge magma chambers open or closed-system?	Ken H Rubin, Chris J Russo, Mike R Perfit, Other	Ken H Rubin
July 24 9:15-9:30	4A1_1D-O3	Li-Pb and U-Th-Ra isotope systematics in metasomatised harzburgite xenoliths from Batan Island, Philippines	Simon Turner, Janne Blitchert-Toft, Raul Brens, Other	Simon Turner
July 24 9:30-9:45	4A1_1D-O4	On the timescales of magma accumulation and evolution at Tambora (Sumbawa, Indonesia) prior to the 1815 eruption	Ralf Gertisser, Stephen Self, Heather Handley, Other	Ralf Gertisser
July 24 9:45-10:00	4A1_1D-O5	Evolution of magma plumbing system of the Iwate Volcano, Northeast Japan, constrained by chronological relationship of the bulk chemical and isotopic composition	Jun'ichi Itoh, Isoji Miyagi, Nguyen Hoang	Jun'ichi Itoh
July 24 10:00-10:15	4A1_1D-O6	The post-Minoan plumbing system behaviour at Santorini Volcanic field: implications for the current unrest phase	Chiara Maria Petrone, Lorella Francalanci, Georges E. Vougioukalakis	Chiara Maria Petrone
July 24 10:15-10:30	4A1_1D-O7	Processes leading up to the 22 ka silicic caldera-forming eruption of Santorini (Greece): Constraints from crystal trace-element fingerprinting and diffusion chronometry	Gareth N Fabbro, Timothy H Druitt, Fidel Costa	Gareth N Fabbro
1D. Insights into magma chamber processes and volcanic forecasting from combined petrological and timescale information				
Oral Presentation July 24 AM2 (10:45-12:30) Room B1				
Chair: Heather Handley, Shane Cronin, Ian Smith, Simon Turner				
July 24 10:45-11:00	4A2_1D-O8	Exsolution lamellae in volcanic pyroxenes as an indicator of cooling times and sizes of magma reservoirs	Fidel Costa, Jason S Herrin	Fidel Costa
July 24 11:00-11:15	4A2_1D-O9	How do quartz watches compare?: glass inclusion faceting versus Ti diffusion profiles	Ayla S Pamukcu, Guilherme AR Gualda, Florence Begue, Other	Ayla S Pamukcu
July 24 11:15-11:30	4A2_1D-O10	Tracking pre-eruptive degassing at Laki, Iceland, through diffusion modelling	Margaret E Hartley, Dan J Morgan, David A Neave, Other	Margaret E Hartley
July 24 11:30-11:45	4A2_1D-O11	Short time scales of pre-eruptive magma mixing processes: petrographic evidence from the 2011 eruptions of Shinmoedake volcano, Kirishima volcanic group, southern Kyushu, Japan	Akihiko Tomiya, Isoji Miyagi, Genji Saito, Other	Akihiko Tomiya
July 24 11:45-12:00	4A2_1D-O12	On the longevity of large upper crustal silicic magma reservoirs	Sarah E Gelman, Francisco J Gutierrez, Olivier Bachmann	Olivier Bachmann
July 24 12:00-12:15	4A2_1D-O13	Petrogenetic process controlling explosivity at an intraplate volcano: a case study from Ulleung Island, Republic of Korea	Marco Brenna, Shane J Cronin, Ian E M Smith, Other	Marco Brenna
July 24 12:15-12:30	4A2_1D-O14	Shallow crustal magma residence times and storage conditions revealed through in situ zircon chemistry at the Pastos Grandes Caldera Complex in SW Bolivia	Jason F Kaiser, Shanaka de Silva, Axel K Schmitt, Other	Jason F Kaiser
4H. Databases in volcanology				
Oral Presentation July 24 AM1 (8:45-10:30) Room B2				
Chair: Benjamin Andrews, Sue Loughlin, Paolo Papale				
July 24 8:45-9:00	4A1_4H-O1 Invited	A virtual community and cyberinfrastructure for collaboration in volcano research and risk mitigation	Jorge V Bajo, Marcus I Bursik, Eliza S Calder, Other	Greg A Valentine
July 24 9:00-9:15	4A1_4H-O2	Delivering the UN Global Assessment of Risk Report for volcanoes	Charlotte Vye-Brown, Mel Auker, Sarah K Brown, Other	Charlotte Vye-Brown
July 24 9:15-9:30	4A1_4H-O3	Volcanic eruption catastrophe loss modelling	Robert Muir-Wood	Robert Muir-Wood
July 24 9:30-9:45	4A1_4H-O4	Asia-Pacific Region Global Earthquake and Volcanic Eruption Risk Management (G-EVER) Consortium: the new hazard mitigation activities	Shinji Takarada	Shinji Takarada
July 24 9:45-10:00	4A1_4H-O5	Challenges and perspectives in the creation of a reference numerical Global Volcano Model	Paolo Papale	Paolo Papale
July 24 10:00-10:15	4A1_4H-O6	Using Vhub to Apply Computational Models to Real-Case Scenarios for Volcanic Hazard Assessment	Eliza S Calder, Jose Luis Palma, Sylvain Charbonnier, Other	Eliza S Calder
July 24 10:15-10:30	4A1_4H-O7	Strengthening volcanic ash hazard and risk assessment capacity in East New Britain, Papua New Guinea: A three year journey from volcano science to community planning and preparedness	Adele N Bear-Crozier, Herman Patia, Kila Mulina, Other	Victoria Miller
4H. Databases in volcanology				
Oral Presentation July 24 AM2 (10:45-12:30) Room B2				
Chair: Steve Sparks, Chris Newhall, Gill Jolly				
July 24 10:45-11:00	4A2_4H-O8 Invited	Global volcano model: progress towards an international co-ordinated network for volcanic hazard and risk.	Stephen RJ Sparks, Adele Bear-Crozier, Charles Connor, Other	Stephen RJ Sparks

July 24 11:00-11:15	4A2_4H-O9	Volcanoes of the World 4.0: The volcano and eruption database of Smithsonian's Global Volcanism Program	Elizabeth Cottrell, Venzke Edward, Siebert Lee, Other	Andrews J Benjamin
July 24 11:15-11:30	4A2_4H-O10	Considerations on the basis of an European Volcano Observations E-infrastructure: the EPOS experience	Giuseppe Puglisi, Patrick Bachelery, Daniele Bailo, Other	Giuseppe Puglisi
July 24 11:30-11:45	4A2_4H-O11	Database analysis for the diagnosis of national capacities when coping volcanic crises	Natalie Ortiz-Guerrero, Cristhian Lombana-Criollo, Hugo Delgado Granados	Natalie Ortiz-Guerrero
July 24 11:45-12:00	4A2_4H-O12	A new global database of volcanic gas emissions	Brendan T McCormick, Laura E Clor, Benjamin J Andrews, Other	Brendan T McCormick
July 24 12:00-12:15	4A2_4H-O13	Two global databases for dome-forming eruptions (DomeHaz and FlowDat): contributions to hazard assessments and potential for future use	Sarah E Ogburn, Eliza S Calder, Sue Loughlin	Eliza S Calder
July 24 12:15-12:30	4A2_4H-O14	A global morphometric database of composite volcanoes	Pablo Grosse, Pablo A Euillades, Leonardo D Euillades, Other	Pablo Grosse

PROGRAM

July 24, PM

Date/Time	No.	Title	Authors	Presenter
3E. Volcanic plume dynamics				
Oral Presentation July 24 PM1 (15:00-16:45) Room A1				
Chair: Costanza Bonadonna, Arnau Folch, Raffaello Cioni				
July 24 15:00-15:15	4P1_3E-O15 Invited	A-Train satellite observations of young volcanic eruption clouds	Simon A. Carn, Fred J. Prata, Kai Yang, Other	Simon A. Carn
July 24 15:15-15:30	4P1_3E-O16	Source conditions and eruptive processes governing the injection of volcanic ash during the 2009 eruptions of Redoubt volcano, Alaska	Alexa R Van Eaton, Larry G Mastin, Amanda B Clarke, Other	Alexa R Van Eaton
July 24 15:30-15:45	4P1_3E-O17	Meteorological interactions with volcanic plumes in the moist tropics: implications for volcanic plume monitoring	Andrew Tupper	Andrew Tupper
July 24 15:45-16:00	4P1_3E-O18	Inverting for hourly volcanic SO ₂ flux using plume satellite imagery and chemistry-transport modelling: application to the 2010 Eyjafjallajökull eruption	Marie Boichu, Laurent Menut, Dmitry Khvorostyanov, Other	Marie Boichu
July 24 16:00-16:15	4P1_3E-O19	Rotating volcanic plumes	Pinaki Chakraborty, Gustavo Gioia, Susan Kieffer	Pinaki Chakraborty
July 24 16:15-16:30	4P1_3E-O20	The 1815 Tambora distal ash fall: Implications for transport and deposition on land and in the deep sea	Jessica Kandlbauer, Steven N Carey, R Stephen J Sparks	Jessica Kandlbauer
July 24 16:30-16:45	4P1_3E-O21	Scaling of volcanic eruptions	Jonas Eliasson, Nario Yasuda, Andreas Vogel, Other	Jonas Eliasson
2C. High-level volcano monitoring and data interpretation				
Oral Presentation July 24 PM1 (15:00-16:45) Room A2				
Chair: Cynthia Werner, Koshun Yamaoka, Chris Bean				
July 24 15:00-15:15	4P1_2C-O15	Development of risk-free observation tools at active volcanoes using unmanned Helicopter	Takao Ohminato, Takayuki Kaneko, Takao Koyama, Other	Takao Ohminato
July 24 15:15-15:30	4P1_2C-O16	Volcano monitoring using ultraviolet cameras: two case studies from Volcan de Colima, Mexico and Volcan Villarrica, Chile	Kelby Hicks, Nial Peters, Yves Moussallam, Other	Kelby Hicks
July 24 15:30-15:45	4P1_2C-O17 Invited	Systematic re-analysis of waveform data from the Hawaiian Volcano Observatory seismic network, 1992 to 2009	Robin S Matoza, Peter M Shearer, Guoqing Lin, Other	Robin S Matoza
July 24 15:45-16:00	4P1_2C-O18	Hypocenter determination of B-type earthquakes using the envelope correlation method: an application to Miyakejima volcano, Japan	Higashi Uchida, Takeshi Nishimura, Hisashi Nakahara, Other	Higashi Uchida
July 24 16:00-16:15	4P1_2C-O19	Microseismicity results from the Volcanic Risk in Saudi Arabia (VORISA) project, northern Harrat Rahat, Al-Madinah, Kingdom of Saudi Arabia	Catherine Lewis Kenedi, Mohammed F. Abdelwahed, Marcos Alvarez, Other	Catherine Lewis Kenedi
July 24 16:15-16:30	4P1_2C-O20	How ambient is ambient noise?	Kathleen F McKee, Gregory P Waite, Joshua P Richardson	Kathleen F McKee
July 24 16:30-16:45	4P1_2C-O21 Invited	Diking-faulting interaction and interpretation of moment tensor solutions	Eleonora Rivalta, Francesco Maccaferri, Luigi Passarelli	Eleonora Rivalta
2E. Remote sensing and terrain modelling				
Oral Presentation July 24 PM1 (15:00-16:45) Room A3				
Chair: Angie Diefenbach, Steve Schilling, Minoru Urai				
July 24 15:00-15:15	4P1_2E-O22 Invited	Volcanic eruption monitoring by thermal image correlation: Pixel offsets show episodic dome growth of the Colima volcano	Thomas R. Walter, Denis Legrand, Hugo Delgado Granados, Other	Thomas R. Walter
July 24 15:15-15:30	4P1_2E-O23	High spatio-temporal resolution photogrammetry of active dome growth, Santiaguito Dome, Guatemala	Benjamin J Andrews, Jeffrey Johnson, Benjamin Phillips, Other	Benjamin J Andrews
July 24 15:30-15:45	4P1_2E-O24	Oblique photogrammetry to measure lava volumes and extrusion rates	Angela K Diefenbach, Steve Schilling	Angela K Diefenbach
July 24 15:45-16:00	4P1_2E-O25 Invited	Volcanic deposit mapping using surface roughness textures	Patrick L Whelley, Lori S Glaze, Eliza S Calder	Patrick L Whelley
July 24 16:00-16:15	4P1_2E-O26	The crucial role of digital elevation modeling to study Nyiragongo and Nyamulagira volcanoes (North Kivu, Democratic Republic of Congo)	Benoit Smets, Fabien Albino, Nicolas d Oreye, Other	Benoit Smets

July 24 16:30-16:45	4P1_2E-O28	Monitoring changes in the active lava lake and Inner Crater at Erebus volcano, Antarctica using terrestrial laser scanning	Drea R Killingsworth, Jed Frechette, Philip Kyle, Other	Drea R Killingsworth
2I. Open system volcanoes Oral Presentation July 24 PM1 (15:00-16:45) Room A5 Chair: Kathy Cashman				
July 24 15:00-15:15	4P1_2I-O14	What infrasound tells us about open-vent volcanic systems	Jeffrey B Johnson, David Fee	Jeffrey B Johnson
July 24 15:15-15:30	4P1_2I-O15	Effects of the atmospheric structure and topography on infrasound propagation around Sakurajima	Giorgio Lacanna, Mie Ichihara, Makiko Iwakuni, Other	Giorgio Lacanna
July 24 15:30-15:45	4P1_2I-O16	Seismic and geodetic precursors of small vulcanian eruptions at Suwanose-jima volcano, Japan	Takeshi Nishimura, Masato Iguchi, Hiroshi Yakiwara, Other	Takeshi Nishimura
July 24 15:45-16:00	4P1_2I-O17	Long lived effusive activity on Arenal Volcano: Insight from a volcano-tectonic study	Cyril Muller, Rodrigo del Potro, Juliet Biggs, Other	Cyril Muller
July 24 16:00-16:15	4P1_2I-O18	Syneruptive deep magma transfer and shallow magma remobilization during the 2011 eruption of Shinmoe-dake, Japan-Constraints from melt inclusions and phase equilibria experiments-	Yuki Suzuki, Atsushi Yasuda, Natsumi Hokanishi, Other	Yuki Suzuki
July 24 16:15-16:30	4P1_2I-O19	Magma mixing and degassing processes of the 2011 eruption series of Shinmoedake, Kirishima volcano, based on petrological monitoring and melt inclusion analyses	Genji Saito	Genji Saito
July 24 16:30-16:45	4P1_2I-O20	Characteristics of magma accumulation process of a basaltic volcano Izu-Oshima, Japan as revealed from integrated monitoring of deep low-frequency earthquakes, volcano deformation and CO2 out-gassing	Hidefumi Watanabe	Hidefumi Watanabe
4D. Forecasting volcanic hazards II Oral Presentation July 24 PM1 (15:00-16:45) Room A6 Chair: Augusto Neri, Charles Connor, Kazutaka Mannen, Hisashi Sasaki				
July 24 15:00-15:15	4P1_4D-O15	Eruption history, conduit migration, and steady discharge of magma for the past 50,000 yr at Esan Volcanic Complex, northern Japan	Daisuke Miura, Ken-ichi Arai, Kiyoshi Toshida, Other	Daisuke Miura
July 24 15:15-15:30	4P1_4D-O16	Modeling of a non-eruptive volcanic deflation with strong earthquake swarm by integrated observation data in Meakan-dake, Hokkaido, Japan	Hiroaki Takahashi, Tomo Shibara, Hiroshi Aoyama, Other	Hiroaki Takahashi
July 24 15:30-15:45	4P1_4D-O17	Seismic anomaly as a medium-term precursor of new (2012-2013) fissure eruption of Plosky Tolbachik volcano, Kamchatka	Yulia Kugaenko, Vadim Saltykov, Petr Voropaev	Yulia Kugaenko
July 24 15:45-16:00	4P1_4D-O18	Assessing volcano state from multi-parameter monitoring data streams and other evidence using Bayesian belief networks	Henry Odbert, Willy Aspinall, Steve Sparks, Other	Henry Odbert
July 24 16:00-16:15	4P1_4D-O19 Invited	Quick analysis method for estimating debris flow prone area caused by rainfall in the volcanically disturbed watersheds	Takao Yamakoshi, Hiroshi Kisa, Takeshi Shimizu, Other	Takeshi Shimizu
July 24 16:15-16:30	4P1_4D-O20	Ellipse-approximated isopach maps for estimating ashfall volume at Sakurajima volcano	Yasuhisa Tajima, Takao Yamakoshi, Akira Tsune, Other	Yasuhisa Tajima
July 24 16:30-16:45	4P1_4D-O21	The next-generation real-time volcanic hazard assessment system in G-EVER	Shinji Takarada	Shinji Takarada
1D. Insights into magma chamber processes and volcanic forecasting from combined petrological and timescale information Oral Presentation July 24 PM1 (15:00-16:45) Room B1 Chair: Heather Handley, Shane Cronin, Ian Smith, Simon Turner				
July 24 15:00-15:15	4P1_1D-O15	Volcanic and compositional evolution of Nemrut stratovolcano over ca. 550,000 years as reflected on land and in tephra layers drilled into adjacent huge Lake Van (Eastern Anatolia)	Mari Sumita, Hans-Ulrich Schmincke, PaleoVan scientific team	Mari Sumita
July 24 15:15-15:30	4P1_1D-O16	Understanding regular variability in magma composition and eruption frequency through high-precision, long tephra records	Shane J. Cronin, Ian E.M. Smith, Mark S. Bebbington, Other	Shane J. Cronin
July 24 15:30-15:45	4P1_1D-O17	Effect of volatiles, crystallization, and lava dome effusion rate on pyroclastic surge dispersal at Merapi volcano, Java, Indonesia	Kimberly Genareau, Shane J. Cronin, Gert Lube	Kimberly Genareau
July 24 15:45-16:00	4P1_1D-O18	Understanding the volcanic activity at Popocatepetl Volcano, Mexico from 1997 to 2010	Julie Roberge, Severine Moune, Angel Briseno-Arellano	Julie Roberge
July 24 16:00-16:15	4P1_1D-O19	Relationships between mafic replenishment and eruption triggering at silicic systems: Insights from time scales of magma interactions	Caroline Bouvet de Maisonneuve, Fidel Costa, Christian Huber	Caroline Bouvet de Maisonneuve
July 24 16:15-16:30	4P1_1D-O20	Late stage assembly of a voluminous ignimbrite from multiple magma batches as revealed by in-situ Sr isotopic measurements	Ben S Ellis, Darin M Schwartz, William M Phillips, Other	Ben S Ellis
July 24 16:30-16:45	4P1_1D-O21	Deformation of Cordón Caulle Volcano (Chile) measured by InSAR from 2007 to 2011	Jennifer A Jay, Matthew E Pritchard, Fidel Costa, Other	Jennifer A Jay

4H. Databases in volcanology**Oral Presentation July 24 PM1 (15:00-16:45) Room B2****Chair: Marcus Bursik, Arnau Folch, Greg Valentine**

July 24 15:00-15:15	4P1_4H-O15	WOVOdat Database: Progress Report 2013	Antonius Ratdomopurbo, Christina Widiwijayanti, Chris Newhall, Other	Antonius Ratdomopurbo
July 24 15:15-15:30	4P1_4H-O16	First results from the Volcano Deformation Database Task Force	Matthew E Pritchard, Francisco Delgado, Jennifer A Jay, Other	Matthew E Pritchard
July 24 15:30-15:45	4P1_4H-O17	Development and analysis of a database of volcanic ash layers from IODP cores as a record of global explosive volcanism.	Sue H Mahony, R. Steve J Sparks, Nick H Barnard	Sue H Mahony
July 24 15:45-16:00	4P1_4H-O18	Evaluation of observational infrastructure for measurement of volcanic ash from surface, air and satellite platforms	Adam Durant, Kjetil Torseth, Nina Kristiansen, Other	Adam Durant
July 24 16:00-16:15	4P1_4H-O19	Explosive volcanic eruptions: analysis of the LaMEVE database	Sarah K. Brown, Sian Crowther, Willy P. Aspinall, Other	Sarah K. Brown
July 24 16:15-16:30	4P1_4H-O20	Database of Quaternary volcanic and intrusive rock bodies in Japan	Kuniaki Nishiki, Jun'ichi Itoh, Tatsuyuki Ueno	Kuniaki Nishiki
July 24 16:30-16:45	4P1_4H-O21	Catalogue of Icelandic volcanoes	Evgenia Ilyinskaya, Gudrun Larsen, Kristin Vogfjord, Other	Evgenia Ilyinskaya

1B. Magma processes in crust**Poster Presentation July 24 Core Time (13:30-15:00)**

July 24 Poster	4W_1B-P1	Magma genesis of the acidic volcanism and association with basaltic volcanism in the intra-arc rift zone of the Izu volcanic arc, Japan	Satoru Haraguchi, Hidekazu Tokuyama, Teruaki Ishii	Satoru Haraguchi
July 24 Poster	4W_1B-P2	Petrology and geochemistry of java volcanoes, indonesia: a key for understanding the lithospheric interior beneath western sunda arc	Mirzam Abdurrachman, Febby Yudhi Pratama	Mirzam Abdurrachman
July 24 Poster	4W_1B-P3	The crustal structure in the cinder cones zone of Plosky Tolbachik volcano, Kamchatka	Yulia Kugaenko, Vadim Saltykov	Yulia Kugaenko
July 24 Poster	4W_1B-P4	Petrology of felsic rocks dredged from the Myojin Seamount and the Myojin Rift in the north Izu-Bonin arc - Contribution of intra-oceanic subduction system to making continental middle crust -	Takanori Yoshida, Satshi Okamura, Izumi Sakamoto, Other	Takanori Yoshida
July 24 Poster	4W_1B-P5	Tomographic image of the crust beneath the Aira caldera in southern Kyushu	Hiroki Miyamachi, Paul Karson Alanis, Hiroshi Yakiwara, Other	Hiroki Miyamachi
July 24 Poster	4W_1B-P6	The significance of two-pyroxene pseudo-decompression paths (PDPs) in mafic to intermediate arc magmas	Georg F Zellmer, Yoshiyuki Iizuka, Anja Moebis, Other	Georg F Zellmer
July 24 Poster	4W_1B-P7	Preliminary petrologic and geochemical observations of volcanic rocks associated with an area of active surface uplift in the Lazufre region, Andean Central Volcanic Zone	Alicia D Wilder, Todd C Feeley, Gary S Michelfelder	Alicia D Wilder
July 24 Poster	4W_1B-P8	8 Ma time series of explosive volcanism at the Central American Volcanic Arc (marine tephros from ODP and DSDP sites)	Julie C Schindlbeck, Steffen Kutterolf, Armin Freundt	Julie C Schindlbeck
July 24 Poster	4W_1B-P9	Santorini volcano magma plumbing system: constraints from a combined experimental and natural products study	Anita Cadoux, Joan Andujar, Bruno Scaillet, Other	Tim Druitt
July 24 Poster	4W_1B-P10	The redox states of basaltic and boninitic magmas throughout the early stage of the Bonin arc formation; Fe-K edge XANES study	Hidemi Ishibashi, Shoko Otake, Kyoko Kanayama, Other	Hidemi Ishibashi
July 24 Poster	4W_1B-P11	Petrological and petrochemical investigations of Iwanoyama-Iyuzan volcanic chain in Higashi-Izu monogenetic volcano group, Izu-Bonin volcanic arc, central Japan	Hiromichi Kanai, Yoji Arakawa, Yoshiyuki Tajima, Other	Hiromichi Kanai
July 24 Poster	4W_1B-P12	Evolution of volcanism and magmatism during initial arc stage of the Oman ophiolite	Yuki Kusano, Yoshiko Adachi, Susumu Umino, Other	Yuki Kusano
July 24 Poster	4W_1B-P13	New geochemical classification of global boninites	Kyoko Kanayama, Keitaro Kitamura, Susumu Umino	Kyoko Kanayama
July 24 Poster	4W_1B-P14	Magma mixing mechanism of Fujiyama lava dome in Takahara volcano, northeast Japan	Yoshiyuki Tajima, Yoji Arakawa, Kei Ikehata, Other	Yoshiyuki Tajima
July 24 Poster	4W_1B-P15	Origin of voluminous andesite - dacite in the Hoho Volcanic Zone : Role of basaltic magma, SW Japan	Yoshiyuki Horikawa, Takashi Nagao	Takashi Nagao
July 24 Poster	4W_1B-P16	Co-Variation of Sr-Nd-Pb-Hf Isotope Chemistries of the Quaternary Lavas and the Basement Granitoids, Northeastern Japan arc	Yuka Hirahara, Shinichi Kagashima, Masao Ban, Other	Yuka Hirahara
July 24 Poster	4W_1B-P17	Relationship between seismic structure and magma migration during the 2011-2012 El Hierro (Canary Islands) eruption	Antonio Villasenor, Carmen del Fresno, Carmen Lopez, Other	Antonio Villasenor
July 24 Poster	4W_1B-P18	Geochemical study of the mafic rocks from Hokkaido, northern Japan: Spatial variations in the wedge mantle and the magma-generation processes at an arc-arc junction	Ayumi Kosugi, Mitsuhiro Nakagawa	Ayumi Kosugi
July 24 Poster	4W_1B-P19	Crustal structure beneath Aso caldera, Japan, as derived from receiver function analyses of waveform data from densely distributed stations	Yuki Abe, Takahiro Ohkura, Takuo Shibutani, Other	Yuki Abe

July 24 Poster	4W_1B-P20	Origin of spatial compositional variations of volcanic rocks from Northern Kurile Islands: Geochemical studies of active volcanoes on Paramushir, Atlasova, Antsiferova islands and submarine volcanoes	Olga Bergal-Kuvikas, Mitsuhiro Nakagawa, Gennady Avdeiko	Olga Bergal-Kuvikas
July 24 Poster	4W_1B-P21	⁴⁰ Ar/ ³⁹ Ar and U-Pb zircon ages provide new constraints on the history and magmatic evolution of the central Aleutian arc	Brian R Jicha, Suzanne M Kay, Robert W Kay, Other	Brian R Jicha
July 24 Poster	4W_1B-P22	A petrological and isotopic study of volcanic rocks from Mt. Arakurayama and other areas, North Fossa Magna, Central Japan	Akiyuki Narita, Masatsugu Yamamoto	Akiyuki Narita
July 24 Poster	4W_1B-P23	Santorini Volcano plumbing system: constraints from melt inclusion volatile contents	Maxime Mercier, Timothy H Druitt, Etienne Deloule, Other	Maxime Mercier
July 24 Poster	4W_1B-P24	Three-dimensional seismic velocity structure of the upper crust beneath Kirishima Volcanoes derived from local earthquake data	Hiroshi Yakiwara, Ryoma Mera, Syuichiro Hirano, Other	Hiroshi Yakiwara
July 24 Poster	4W_1B-P25	Ar-Ar dating for volcanic rocks from Bowers Ridge, Bering Sea at site U1342A and U1342D	Keiko Sato, Hiroshi Kawabata, Hironobu Hyodo, Other	Keiko Sato
July 24 Poster	4W_1B-P26	"Hot Zone" development beneath a long-lived andesite stratovolcano: Temporal evolution of the Mt. Taranaki (New Zealand) magmatic system	Anke V Zernack, Richard Price, Robert B Stewart, Other	Anke V Zernack
July 24 Poster	4W_1B-P27	Crustal structure of preexisting Mesozoic basement beneath the Northern Izu-Bonin Arc	Kenichiro Tani, Osamu Ishizuka, Hayato Ueda, Other	Kenichiro Tani
July 24 Poster	4W_1B-P28	Imaging rapidly deforming ocean island volcanoes in the western Galápagos archipelago, Ecuador	Gabrielle Tepp, Cynthia Ebinger, Mario Ruiz, Other	Gabrielle Tepp
July 24 Poster	4W_1B-P29	Mingling-induced crystallization from Saruana Lava, Chokai, Tohoku Japan, and the origins of end member magmas	Tsukasa Ohba, Hajime Oikawa, Shintaro Hayashi, Other	Tsukasa Ohba
July 24 Poster	4W_1B-P30	The initiation of crustal recycling processes in island arcs: insights from the Soufriere Volcanic Centre, Saint Lucia	Jan Lindsay, Axel Schmitt, Robert Trumbull, Other	Jan Lindsay
July 24 Poster	4W_1B-P31	Primary boninite magmas explored from melt inclusions	Keitaro Kitamura, Susumu Umino, Kyoko Kanayama	Keitaro Kitamura
July 24 Poster	4W_1B-P32	None of us belong: crystal chemistry of andesites in Dominica, Lesser Antilles	Tracy M Howe, Jan M Lindsay, Phil A Shane, Other	Tracy M Howe

1D. Insights into magma chamber processes and volcanic forecasting from combined petrological and timescale information

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_1D-P1	Magmatic control on volcanic activity at Volcan de Colima, Mexico	Reubi Olivier, Blundy Jon, Pickles Joe, Other	Reubi Olivier
July 24 Poster	4W_1D-P2	The 1707 AD eruption of Fuji Volcano, Japan: Magmatic Processes and Timescales	Elisabeth Widom, David C Kuentz	Elisabeth Widom
July 24 Poster	4W_1D-P3	Uranium-series timescale constraints on recent changes in the eruptive behaviour of Merapi Volcano, Java, Indonesia	Heather Handley, Ralf Gertisser, Mark Reagan, Other	Heather Handley
July 24 Poster	4W_1D-P4	Magma-mixing and -mingling as key magmatic processes controlling the development of the volcanic events in the Gutâi Neogene Volcanic Zone, Eastern Carpathians, Romania	Marinel Kovacs, Alexandrina Fülöp, Zoltan Pécskay, Other	Marinel Kovacs
July 24 Poster	4W_1D-P5	Evolution of magma plumbing system of Miyakejima volcano	Masashi Ushioda, Eiichi Takahashi, Toshihiro Suzuki, Other	Masashi Ushioda
July 24 Poster	4W_1D-P6	Magma mixing indicated by heterogeneous structure in the Mikurasawa lava, the Taisetsu volcano, in central Hokkaido, Japan	Hikaru Baba, Keiji Wada, Eiichi Sato	Hikaru Baba
July 24 Poster	4W_1D-P7	Evolution of magma plumbing system of Sakurajima volcano in the last 50 years: Frequent vulcanian eruptions controlled by basalt injection	Kaho Ebihara, Mitsuhiro Nakagawa, Akiko Matsumoto, Other	Kaho Ebihara
July 24 Poster	4W_1D-P8	Magma process and systems of the Kyoho eruption of Shinmoe-dake volcano in Kirishima volcanoes, Japan	Tsuyoshi Miyamoto	Tsuyoshi Miyamoto
July 24 Poster	4W_1D-P9	Changes in magma composition and formation process of Minamidake stratovolcano, at Sakurajima volcano, Kyushu, Japan; inferred from paleomagnetic age estimate and chemical composition analysis.	Daisuke Miki, Kozo Uto, Nguyen Hoang, Other	Daisuke Miki
July 24 Poster	4W_1D-P10	Dynamics of magma mixing and structure of silicic magma chamber: Evidence from petrogenesis of two types of mafic inclusions of Kurodake volcano, Central Hokkaido, Japan	Eiichi Sato, Keiji Wada	Eiichi Sato
July 24 Poster	4W_1D-P11	Sulfur-rich basaltic magma injection into the magma plumbing system of Asama 2004 eruption: Melt inclusion study for magma compositions, the timing of degassing and mixing, and sulfur supply	Yoshiaki Yamaguchi, Tamami Yamaguchi, Yasushi Ohta, Other	Yoshiaki Yamaguchi
July 24 Poster	4W_1D-P12	Olivine residence times for historical lavas of Chokai volcano, NE Japan: Estimation by Fe-Mg and Ni diffusions in olivine crystals	Takanori Sato, Masao Ban, Tsukasa Ohba, Other	Takanori Sato
July 24 Poster	4W_1D-P13	Depths of two magma chambers of the Fuji 1707 eruption	Toshitsugu Fujii, Atsushi Yasuda, Akiko Yasuda	Toshitsugu Fujii
July 24 Poster	4W_1D-P14	Processes leading up to the 22 ka silicic caldera-forming eruption of Santorini (Greece): Constraints from field, ⁴⁰ Ar/ ³⁹ Ar and chemical data	Gareth N Fabbro, Timothy H Druitt, Stephane Scaillet	Gareth N Fabbro

July 24 Poster	4W_1D-P15	A combined mineral and melt inclusion study of the Nea Kameni dacites	Ben S Ellis, Michael C Rowe, Kostas Kyriakopoulos	Ben S Ellis
July 24 Poster	4W_1D-P16	Evolution of the Austurhorn Intrusive Complex revealed by zircon elemental and isotopic geochemistry and geochronology	Abraham J Padilla, Tamara L Carley, Calvin F Miller, Other	Abraham J Padilla
July 24 Poster	4W_1D-P17	Post-supereruption reconstruction of Taupo volcano (New Zealand) through systematic crystallization episodes	Simon J Barker, Colin J.N Wilson, Bruce L.A Charlier, Other	Simon J Barker
July 24 Poster	4W_1D-P18	Experimental constraints on mixing between basaltic and rhyolitic magmas along the Norris Mammoth Corridor in the Yellowstone National Park (USA)	Daniele Morgavi, Diego Perugini, Chad J. Pritchard, Other	Daniele Morgavi
July 24 Poster	4W_1D-P19	Magma mixing/mingling and viscous fingering: Analogue experiments and geometry of interfaces	Nodoka Takada, Eiichi Sato, Kazuhito Yamasaki	Eiichi Sato
July 24 Poster	4W_1D-P20	The role of bubble ascent in magma mixing	Sebastian Wiesmaier, Daniele Morgavi, Diego Perugini, Other	Sebastian Wiesmaier
July 24 Poster	4W_1D-P21	Amphibole Reaction Rim Development: EBSD insights into crystal nucleation and growth	Sarah Henton De Angelis, Yan Lavallee, Jessica Larsen, Other	Sarah Henton De Angelis
July 24 Poster	4W_1D-P22	DIPRA: A new user-friendly program to determine the timescales of magmatic processes from diffusion modelling of multiple elements in olivine	Társilo Girona, Fidel Costa	Társilo Girona
July 24 Poster	4W_1D-P23	Identifying transitions in activity and precursors to major eruptive events at Mt. Taranaki, New Zealand	Kimberly Genareau, Shane J. Cronin, Thomas Platz	Kimberly Genareau
2C. High-level volcano monitoring and data interpretation				
Poster Presentation July 24 Core Time (13:30-15:00)				
July 24 Poster	4W_2C-P1	Applying UV cameras for SO ₂ detection to distant or optically thick volcanic plumes	Christoph Kern, Cynthia Werner, Tamar Elias, Other	Christoph Kern
July 24 Poster	4W_2C-P2	New developments in UV imaging for the monitoring of volcanic SO ₂	Jean-Francois Smekens, Michael R. Burton, Amanda B. Clarke, Other	Jean-Francois Smekens
July 24 Poster	4W_2C-P3	The eruptive activity of Sakurajima Showa crater, Kyushu, Japan	Koji Kato, Masanao Shimomura, Hiroaki Inaba, Other	Koji Kato
July 24 Poster	4W_2C-P4	The 2011 eruptive activity of Shinmoedake volcano, Kirishimayama, Kyushu, Japan	Koji Kato, Masanao Shimomura, Hiroaki Inaba, Other	Koji Kato
July 24 Poster	4W_2C-P5	Best practice volcano monitoring in New Zealand.	Craig A Miller, Arthur D Jolly	Craig A Miller
July 24 Poster	4W_2C-P6	Activity monitoring of the volcano Kizimen using remote methods, eruption in 2010-2012	Irina Nuzhdina	Irina Nuzhdina
July 24 Poster	4W_2C-P7	The Domerapi project. Dynamics of an arc volcano with extruding lava domes, Merapi (Indonesia): from the magma reservoir to eruptive processes	J. P. Metaxian, S. Surono, C. Martel, Other	J. P. Metaxian
July 24 Poster	4W_2C-P8	MaGCAP-V: Windows-based software to analyze ground deformation and geomagnetic change in volcanic areas	Keiichi Fukui, Shinobu Ando, Kenji Fujiwara, Other	Keiichi Fukui
July 24 Poster	4W_2C-P9	Pressure source inferred from long-term volcanic deformation observed by GPS in Izu-Oshima	Tetsuya Yamamoto, Shin'ya Onizawa, Akimichi Takagi	Tetsuya Yamamoto
July 24 Poster	4W_2C-P10	Restart of magma accumulation after the 2010 eruption at Merapi Volcano, Indonesia detected by GPS observation	Takahiro Ohkura, Masato Iguchi, Muhamad Hendrasto, Other	Takahiro Ohkura
July 24 Poster	4W_2C-P11	The Pernicana and Trecastagni faults: the most active structures dissecting Mt. Etna volcano (Sicily) studied by multidisciplinary ground deformation measurements	Alessandro Bonforte, Gianpiero Aiesi, Giuseppe Brandi, Other	Giuseppe Puglisi
July 24 Poster	4W_2C-P12	25 years of GPS measurements at Mt. Etna	Giuseppe Puglisi, EtnaGPS Team	Giuseppe Puglisi
July 24 Poster	4W_2C-P13	Analysis of Volcanic earthquake swarm in Gede Volcano, Indonesia base on seismicity and focal mechanism	Ahmad Basuki, Dannie Hidayat, Iyan Mulyana	Ahmad Basuki
July 24 Poster	4W_2C-P14	Active monitoring at active Volcanoes -Monitoring temporal change of transfer function in Sakurajima volcano, Japan	Hiroki Miyamachi, Koshun Yamaoka, Masato Iguchi, Other	Hiroki Miyamachi
July 24 Poster	4W_2C-P15	Seismic source determination on volcanoes: lessons from high resolution field experiments	Christopher J. Bean, Ivan Lokmer, Louis DeBarros	Christopher J. Bean
July 24 Poster	4W_2C-P16	A ray-tracing study for wind effects in middle-distance infrasound propagation	Makiko Iwakuni, Mie Ichihara, Giorgio Lacanna, Other	Makiko Iwakuni
July 24 Poster	4W_2C-P17	Relationship between infrasound pressure and possible flight distance of volcanic bomb	Akimichi Takagi, Toshiki Shimbori, Tetsuya Yamamoto, Other	Akimichi Takagi
July 24 Poster	4W_2C-P18	PRECURSOR TO ERUPTION OF LOKON VOLCANO - NORTH SULAWESI, INDONESIA DURING 2011 - 2012	Kristianto Kristianto, Nia Haerani, Ahmad Basuki, Other	Kristianto Kristianto
July 24 Poster	4W_2C-P19	Volcanic process of the 2011 Shinmoedake eruption inferred from extensometer records	Ken'ichi Yamazaki, Masahiro Teraishi, Kazuhiro Ishihara, Other	Ken'ichi Yamazaki
July 24 Poster	4W_2C-P20	Monitoring the 2011 dome growth at Colima Volcano using Digital Image correlation	Jacqueline Salzer, Thomas Walter, Legrand Denis, Other	Jacqueline Salzer
July 24 Poster	4W_2C-P21	Evolving Multi-Parameter Monitoring Network in Mayon Volcano, Philippines	Ma. Antonia V Bornas, Hiroyuki Kumagai, Christopher Newhall, Other	Ma. Antonia V Bornas
July 24 Poster	4W_2C-P22	A new double-difference location method for LP event families: the ability to image structures within volcanoes.	Megan Zecevic, Thomas S Eyre, Louis De Barros, Other	Megan Zecevic
July 24 Poster	4W_2C-P23	Seismicity of New Tolbachik Fissure Eruption	Sergey Senyukov, Svetlana Droznina, Irina Nuzhdina, Other	Sergey Senyukov

July 24 Poster	4W_2C-P24	Constraining melt storage and transport beneath Nabro volcano, Eritrea using seismic anisotropy	James OS Hammond, Mike Kendall, James Wookey, Other	James OS Hammond
July 24 Poster	4W_2C-P25	Strain recording using a new fiber-optic Bragg-grating sensor	Olivier Coutant, Mikhael Demengin, Etienne Le Coarer, Other	Olivier Coutant
July 24 Poster	4W_2C-P26	The campi flegrei deep drilling project: initial results from gas monitoring site surveys and drilling mud gas monitoring during the 500 m pilot hole drilling	Renato Somma, Thomas Wiersberg, Jorg Erzinger, Other	Renato Somma
July 24 Poster	4W_2C-P27	Precursory anomalies before Karymsky seismo-volcanic crisis on January 1-2, 1996 in Kamchatka by multi-scale seismicity and hydrogeochemical data	Vadim Saltykov, Gennadiy Riabinin, Yulia Kugaenko, Other	Vadim Saltykov
2E. Remote sensing and terrain modelling				
Poster Presentation July 24 Core Time (13:30-15:00)				
July 24 Poster	4W_2E-P1	A low-cost SO ₂ imager with the use of digital cameras of consumer use	Takeshi Hashimoto, Akihiko Terada, Mitsumu Ejiri, Other	Takeshi Hashimoto
July 24 Poster	4W_2E-P2	Separate quantification of volcanic gas fluxes from showa and minamidake craters at sakurajima volcano, japan	Ryunosuke Kazahaya, Toshiya Mori, Keigo Yamamoto	Ryunosuke Kazahaya
July 24 Poster	4W_2E-P3	Yearly averaged BrO and SO ₂ emissions from Ambrym volcano as seen by the GOME-2 satellite instrument	Christoph Hoermann, Holger Sihler, Nicole Bobrowski, Other	Christoph Hoermann
July 24 Poster	4W_2E-P4	Non negligible passive degassing from Kerinci, the greatest volcano in Indonesia	Philipson Bani, Surono, Mockamad Hendrasto, Other	Philipson Bani
July 24 Poster	4W_2E-P5	Measurements of BrO/SO ₂ ratios at Popocatepetl from 2007 to 2012	Matthias Fickel, Hugo Delgado Granados	Hugo Delgado Granados
July 24 Poster	4W_2E-P6	Estimating emissions and lifetime of SO ₂ from space: A case study of the Kilauea Volcano	Steffen Beirle, Christoph Hoermann, Marloes Penning de Vries, Other	Christoph Hoermann
July 24 Poster	4W_2E-P7	Ultraviolet camera monitoring of SO ₂ emissions from Volcan Villarrica, Chile 2012 - 2013	Kelby Hicks, Nial Peters, Yves Moussallam, Other	Kelby Hicks
July 24 Poster	4W_2E-P8	GROUND-BASED IMAGING OF VOLCANIC PLUMES	Robert Wright, Paul Lucey, Keith Horton, Other	Robert Wright
July 24 Poster	4W_2E-P9	Remote sensing of volcanic gases using wavelength-tunable mid-infrared laser	Takayuki Tomida, Satoshi Wada, Akimichi Taketa, Other	Takayuki Tomida
July 24 Poster	4W_2E-P10	Remote sensing of vapor phase chemical agent using wavelength-tunable laser	Satoshi Wada, Takayuki Tomida, Akimichi Taketa, Other	Satoshi Wada
July 24 Poster	4W_2E-P11	Behaviors of volcanic ash, SO ₂ and sulfate aerosol: A perspective from research results on academic journals	Yoshihiro Sawada	Yoshihiro Sawada
July 24 Poster	4W_2E-P12	The NASA Volcano Sensor Web (VSW): recent observations, activity and network expansion	Ashley G Davies, Steve Chien, David McLaren, Other	Ashley G Davies
July 24 Poster	4W_2E-P13 Invited	REALTIME MONITORING OF ACTIVE VOLCANOES IN EAST ASIA USING MODIS AND MTSAT DATA AND ITS ADVANCEMENT BY GCOM-C1 SGLI	Takayuki Kaneko, Atsushi Yasuda, Kenji Takasaki, Other	Takayuki Kaneko
July 24 Poster	4W_2E-P14	Development of a remote multi-sensor global monitoring system for active volcanoes	Verity J.B. Flower, Simon A Carn, Robert Wright	Verity J.B. Flower
July 24 Poster	4W_2E-P15	Monitoring of Merapi Volcano in Indonesia using Remote Sensing Data	Su-Kyung Kim, Changwook Lee, Minji Cho	Su-Kyung Kim
July 24 Poster	4W_2E-P16	Identification of long- and short-term eruptive trends using satellite TIR records of Merapi Volcano, Java, Indonesia	Brett B. Carr, Amanda B. Clarke, Loyc Vanderkluyssen	Brett B. Carr
July 24 Poster	4W_2E-P17	Near real-time monitoring of Taal volcano from space by means of an automated hot spot detection system	Alfredo Falconieri, Francesco Marchese, Rossana Paciello, Other	Valerio Tramutoli
July 24 Poster	4W_2E-P18	Estimation of clast-size distribution and eruption energy partition from the thermal images of debris ejected by dome-destruction explosions: Applications to Colima and Popocatepetl volcanoes	Enrique Cardenas-Sanchez, Servando De la Cruz-Reyna, Nick R. Varley	Enrique Cardenas-Sanchez
July 24 Poster	4W_2E-P19	Pyroclastic flow and lahar hazards in populous, developing regions: Integrated TIR and SAR data analysis	Janine B Krippner, Michael S Ramsey	Janine B Krippner
July 24 Poster	4W_2E-P20	Numerical Simulation of Volcanic Ash Dispersion due to the Explosive Eruption of the Mt. Baegdu	Eun-Sk Jang, Sang-Heon Lee, Nam-Hee Choi	Eun-Sk Jang
July 24 Poster	4W_2E-P21	Balloon-borne Observation of Volcanic Ash from Shinmoe-dake (Kirishima) Volcano in March 2011	Masashi Nagai, Motoo Ukawa, Toshikazu Tanada, Other	Masashi Nagai
July 24 Poster	4W_2E-P22	Characterizing the October 2010 Lava Flow of Piton de la Fournaise using Space-based data	Mary Grace Bato, Jean-Luc Froger, Andrew JL Harris, Other	Mary Grace Bato
July 24 Poster	4W_2E-P23	Remote temperature sensing of active fumaroles using hydrogen isotopes of molecular hydrogen in volcanic plumes: Temporal variation in the temperature of fumaroles in Aso volcano	Ururu Tsunogai, Daisuke D Komatsu, Fumiko Nakagawa	Ururu Tsunogai
July 24 Poster	4W_2E-P24	Evolution of the lava dome in the 2011 Shinmoe-dake (Japan) eruption revealed by spaceborne SAR imagery	Taku Ozawa, Tomofumi Kozono	Taku Ozawa
July 24 Poster	4W_2E-P25	Geomorphic analysis and numerical flow simulations from the 2012 Te Maari eruption from Mt. Tongariro, New Zealand.	Jonathan Procter, Anke Zernack, Harry Keys, Other	Jonathan Procter
July 24 Poster	4W_2E-P26	Stability assessment of Unzen lava dome by long and short range displacement monitoring	Masaaki Mantoku, Mitsunori Sugiyama, Tomonori Todaka, Other	Yuichi Nakashima
July 24 Poster	4W_2E-P27	Application of the Kinect sensor to analogue modeling of volcanic deformation	Riccardo Tortini, Simon Carn	Riccardo Tortini

July 24 Poster	4W_2E-P28	X-Band SAR topography changes for pyroclastic density current volume estimation: the 2010 Merapi eruption case study	Christian Bignami, Joel Ruch, Marco Chini, Other	Joel Ruch
July 24 Poster	4W_2E-P29	Evaluation of volcanic activity by using LiDAR Data in Aso Volcano, Japan	Masayuki Sakagami, Hisashi Sasaki	Hisashi Sasaki
July 24 Poster	4W_2E-P30	Monitoring of geothermal activity in the ice-covered Katla caldera, Iceland, 1999-2012	Thordis Hognadottir, Magnus T Gudmundsson, Eyjolfur Magnusson, Other	Thordis Hognadottir
July 24 Poster	4W_2E-P31	Documenting dome and glacier changes from the 2004-2008 eruption at Mount St. Helens, USA	Steve Schilling, Angela K Diefenbach	Angela K Diefenbach
July 24 Poster	4W_2E-P32	Geomorphic constraints on the Pleistocene growth of Uturuncu Volcano, Bolivia	Jonathan P Perkins, Noah J Finnegan	Jonathan P Perkins
July 24 Poster	4W_2E-P33	Dome contraction at Colima Volcano in 2012 as constrained by TerraSAR-X interferometry	Jacqueline Salzer, Thomas Walter, Legrand Denis, Other	Jacqueline Salzer
July 24 Poster	4W_2E-P34	Time Series Analysis for Sinabung Volcano in Indonesia using InSAR Technique	Changwook Lee, Young-Jean Choi, Minji Cho, Other	Changwook Lee

2I. Open system volcanoes

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_2I-P1	Dissecting the August 2012 Paroxysmal Eruption: Advances and Challenges in Monitoring Open System Activity at Tungurahua Volcano, Ecuador	John J Lyons, Mario C Ruiz, Benjamin Bernard, Other	John J Lyons
July 24 Poster	4W_2I-P2	Precursors to explosive eruptions at the persistently restless Telica Volcano, Nicaragua.	Mel Rodgers, Halldor Geirsson, Molly Witter, Other	Mel Rodgers
July 24 Poster	4W_2I-P3	Volcano deformation caused by magma recession during a vulcanian explosion at Showa-crater of Sakurajima, Japan	Takashi Minowa, Ryohei Kawaguchi, Takeshi Nishimura	Takashi Minowa
July 24 Poster	4W_2I-P4	Characteristics of precursory volcanic earthquakes to eruptions at the Showa crater of Sakurajima volcano, Japan	Takeshi Tameguri, Masato Iguchi	Takeshi Tameguri
July 24 Poster	4W_2I-P5	Petrological monitoring of volcanic ash and evaluation of on-going eruptive activity of Sakurajima volcano, Japan: Characterization of juvenile magma and its evolution since 2006	Akiko Matsumoto, Mitsuhiro Nakagawa, Mizuho Amma-Miyasaka, Other	Akiko Matsumoto
July 24 Poster	4W_2I-P6	Seismic and tilt observation of vulcanian explosions at Lokon-Empung volcano, Northern Sulawesi, Indonesia	Taishi Yamada, Hiroshi Aoyama, Takeshi Nishimura, Other	Taishi Yamada
July 24 Poster	4W_2I-P7	Variations in eruptive style and depositional processes of Neoproterozoic terrestrial volcano-sedimentary successions in the Hamid area, North Eastern Desert, Egypt	Ezz El Din Abdel Hakim Khalaf	Ezz El Din Abdel Hakim Khalaf
July 24 Poster	4W_2I-P8	Lava dome structures and their significance	Yan Lavalley, Jackie E. Kendrick, Adrian J. Hornby, Other	Yan Lavalley
July 24 Poster	4W_2I-P9	Frictional processes in glass and ash gouge	Yan Lavalley, Jackie E. Kendrick, Adrian J. Hornby, Other	Yan Lavalley

2J. Understanding sudden effusive-explosive transitions

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_2J-P1	Explosive versus effusive eruptive activity at Merapi volcano, Java, Indonesia.	Mary-Ann del Marmol, Bruce D. Marsh, Ralf Gertisser, Other	Mary-Ann del Marmol
July 24 Poster	4W_2J-P2	Textural and Mineral Chemistry Constraints On Evolution of Merapi Volcano, Indonesia	Sabrina Innocenti, Mary-Ann del Marmol, Barry Voight, Other	Mary-Ann del Marmol
July 24 Poster	4W_2J-P3	Effects of magma and conduit conditions on transitions between effusive and explosive activity: A numerical modeling approach to illuminate the 2006-2010 activity at Merapi Volcano, Indonesia	Brett B. Carr, Amanda B. Clarke, Mattia De' Micheli Vitturi, Other	Brett B. Carr
July 24 Poster	4W_2J-P4	Evolution of conduit flow during the 2011 eruption of Shinmoe-dake, Japan-insights into cyclic sub-Plinian activity and shifting eruption style of andesite magma	Yuki Suzuki, Fukashi Maeno, Masashi Nagai, Other	Yuki Suzuki
July 24 Poster	4W_2J-P5	Unsteady and steady phases of the Kaharoa 1314 eruption, Tarawera volcano, New Zealand	Rebecca J Carey, Bruce F Houghton, Samantha J Weaver, Other	Rebecca J Carey

2L. Structure and properties of magmatic liquids

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_2L-P1	The nature of hydroxyl groups in aluminosilicate glasses	Wim J Malfait, Xianyu Xue	Wim J Malfait
July 24 Poster	4W_2L-P2	Determination of water speciation in hydrous Na ₂ Si ₂ O ₅ melt at high temperature and high pressure	Nadezda Chertkova, Shigeru Yamashita	Nadezda Chertkova

3E. Volcanic plume dynamics

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_3E-P1	Probabilistic volcanic ash dispersal modelling using PF3D: An example from Gunung Ciremai, West Java Indonesia	Adele N Bear-Crozier, Nugraha Kartadinata, Anjar Heriwaseso	Victoria Miller
July 24 Poster	4W_3E-P2	Infrasound of sustained volcanic eruptions, a laboratory and field study	Elizabeth E C Swanson, Theunissen Raf, Phillips C Jeremy, Other	Elizabeth E C Swanson
July 24 Poster	4W_3E-P3	3D Lattice-Boltzmann strategies: New insights into Volcanic Jet Dynamics and Infrasound	Federico Brogi, Costanza Bonadonna, Maurizio Ripepe, Other	Federico Brogi
July 24 Poster	4W_3E-P4	Effects of vent asymmetry on plume dynamics for explosive eruptions	Shi Sim, Darcy Ogden	Shi Sim

July 24 Poster	4W_3E-P5	Smoluchowski kernels for dry particle aggregation: Cellular Automata and experimental investigations	Eduardo Rossi, Gholamhossein Bagheri, Costanza Bonadonna, Other	Eduardo Rossi
July 24 Poster	4W_3E-P6	Water-isotope evidence of a persistent plume observed in snow and ice samples at Erebus volcano, Antarctica	Aaron G Curtis, Philip R Kyle, Laura Jones, Other	Aaron G Curtis
July 24 Poster	4W_3E-P7	Towards improved characterisation of volcanic ash	Emma J Nicholson, Katharine V Cashman, Alison C Rust, Other	Emma J Nicholson
July 24 Poster	4W_3E-P8	Effects of subgrid-scale turbulent models on spatial structure in large-eddy simulation of an eruption column	Hitoshi Suto, Yasuo Hattori, Kiyoshi Toshida	Hitoshi Suto
July 24 Poster	4W_3E-P9	Reconstruction of volcanic plume properties through integration of infrared imagery and analytical one-dimensional models	Sebastien Valade, Matteo Cerninara	Sebastien Valade
July 24 Poster	4W_3E-P10	Three-dimensional acoustic source localization of explosion and degassing events at Karymsky Volcano, Kamchatka, Russia.	Colin R Rowell, David Fee, Curt A.L. Szuberla, Other	Colin R Rowell
July 24 Poster	4W_3E-P11	Direct Numerical Simulation of (pocket-size) volcanic jets	Joern L Sesterhenn, Flavia C Miranda, Juan J Pena-Fernandez	Joern L Sesterhenn
July 24 Poster	4W_3E-P12	Premature fallout of fine ash: the role of convective instabilities	Irene Manzella, Costanza Bonadonna, Jeremy Phillips	Irene Manzella
July 24 Poster	4W_3E-P13	Effects of complex plume morphology on tephra dispersion modeling in ATHAM 3D	Shannon EK Nawotniak, Marcus I Bursik	Shannon EK Nawotniak
July 24 Poster	4W_3E-P14	Eruptions on the fast track, part a): computational routines for processing visible and thermal high-speed videos of explosive eruptions	Damien Gaudin, Monica Moroni, Jacopo Taddeucci, Other	Damien Gaudin
July 24 Poster	4W_3E-P15	The effect of pre-existing craters on the initial development of explosive volcanic eruptions: an experimental investigation	Jacopo Taddeucci, Greg A. Valentine, Ingo Sonder, Other	Jacopo Taddeucci
July 24 Poster	4W_3E-P16	Particle detection and velocity prediction for volcanic eruptions : a preliminary study	Maxime Bombrun, Vincent Barra, Andrew Harris	Maxime Bombrun

3I. Active crater lakes

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_3I-P1	A physico-chemical study of the Gulf of Kabuno which highlights the risk of a cataclysmic gas explosion	Halbwachs Michel	Halbwachs Michel
July 24 Poster	4W_3I-P2	Acoustic emission of Tarissan boiling Lake, La Soufriere de Guadeloupe	Olivier coutant, Yves Le gonidec, Dominique gibert, Other	Olivier coutant
July 24 Poster	4W_3I-P3	Specific features of the microbiota in the crater lake of east Kamchatka	Elena Georgiyevna Lupikina	Elena Georgiyevna Lupikina
July 24 Poster	4W_3I-P4	Evaluating magmatic volatile input in Taal volcano's Main Crater Lake and Lake Taal, using combined geochemical and hydro-acoustic techniques	Katharine Maussen, Alain Bernard, PHIVOLCS staff	Katharine Maussen
July 24 Poster	4W_3I-P5	An interactive web-based database application for collaborative collection, storage and retrieval of data on volcanic lakes	Martijn J Keizer, Manfred J Van Bergen, Michael T.M. Emmerich	Martijn J Keizer
July 24 Poster	4W_3I-P6	Conductivity distribution of the surface layer in the northern Aso Caldera	Tsuneomi Kagiya, Mitsuru Utsugi, Shin Yoshikawa, Other	Tsuneomi Kagiya
July 24 Poster	4W_3I-P7	Fluid injections at a crater lake of Aso volcano	Akihiko Yokoo	Akihiko Yokoo
July 24 Poster	4W_3I-P8	Water flow and circulation in crater lakes of Kusatsu-Shirane volcano, Japan, as studied by using radioactive cesium as a hydrological tracer	Yoshikazu Kikawada, Aya Okawa, Ko Nakamachi, Other	Yoshikazu Kikawada
July 24 Poster	4W_3I-P9	Variation of water isotopes and control mechanisms in lakes of the Cameroon Volcanic Line (CVL), Cameroon (West-Africa)	Issa, Takeshi Ohba, Wilson Fantong, Other	Issa

3K. Volcano-ice interaction and planetary volcanism

Poster Presentation July 24 Core Time (13:30-15:00)

July 24 Poster	4W_3K-P1 Invited	Evaluating methane clathrate destabilization by heat from lava flows as a mechanism for supplying Titan's atmospheric methane	Ashley Gerard Davies, Christophe Sotin, Mathieu Choukroun, Other	Ashley Gerard Davies
July 24 Poster	4W_3K-P2 Invited	Cryovolcanism on Titan	Rosaly M Lopes, Randolph L Kirk, Jani Radebaugh, Other	Rosaly M Lopes
July 24 Poster	4W_3K-P3	Observational and Theoretical Limits on Present-Day Cryovolcanic Activity on Titan with application to Planetary Protection	Ralph D Lorenz, Michael A Janssen, Rosaly L. Lopes, Other	Ralph D Lorenz
July 24 Poster	4W_3K-P4	Multiple fissure-fed construction of a glaciovolcanic complex at the Askja volcano, Iceland	Ian Skilling, David McGarvie, Alison Graettinger, Other	Alison Graettinger
July 24 Poster	4W_3K-P5	Environmental reconstruction of basaltic glaciovolcanic deposits at Askja Volcano, Iceland, using lithofacies and geomorphology	Alison H Graettinger, Ian P Skilling, Dave W McGarvie, Other	Alison H Graettinger
July 24 Poster	4W_3K-P6	Eruptive gap during the Last Glacial Maximum at Nevado de Toluca Volcano, Mexico.	Lucia Capra, Lorenzo Vazquez-Selem, Gianluca Groppelli, Other	Lucia Capra
July 24 Poster	4W_3K-P7	Viscous flow behavior of tholeiitic and alkaline Fe-rich Martian Basalts	Oryaella Magdalena Chevrel, David Baratoux, Kai-Uwe Hess, Other	Oryaella Magdalena Chevrel

4D. Forecasting volcanic hazards II**Poster Presentation July 24 Core Time (13:30-15:00)**

July 24 Poster	4W_4D-P1	Assessing long term hazards for la Soufriere of Guadeloupe volcano: insights from a new eruptive chronology, credible scenario definition, and integrated impact modelling	Jean-Christophe Komorowski, Yoann Legendre, Sara Barsotti, Other	Jean-Christophe Komorowski
July 24 Poster	4W_4D-P2	Multi source- ash fallout hazard map in western Caldas department (Colombia)	Carlos Borrero, Ana M. Garcia, Hugo F. Murcia, Other	Carlos Borrero
July 24 Poster	4W_4D-P3	Exploring the interface of probabilistic hazard analysis and risk assessment using BET_VH, Okataina Volcanic Centre, New Zealand	Mary Anne Thompson, Jan Lindsay, Laura Sandri, Other	Mary Anne Thompson
July 24 Poster	4W_4D-P4	Modeling volcanic hazards of Jan Mayen	Eirik Gjerlow, Armann Hoskuldsson, Costanza Bonadonna, Other	Eirik Gjerlow
July 24 Poster	4W_4D-P5	Risk analysis of Colima volcano, Mexico	Carlos Suarez-Plascencia, Miguel A Camarena-Garcia, Francisco J Nunez-Cornu	Carlos Suarez-Plascencia
July 24 Poster	4W_4D-P6	Re-interpretation of the Mugogo 1957 eruption in the framework of the volcano-tectonic structure of the Virunga Volcanic Province, D.R.Congo and Rwanda	Sam Poppe, Benoit Smets, Fabien Albino, Other	Sam Poppe
July 24 Poster	4W_4D-P7	Potentially hazardous volcanic systems in southern Ethiopia	Vladislav Rappich, Yewubinesh Bekele, Daniel Kassaye, Other	Vladislav Rappich
July 24 Poster	4W_4D-P8	The Tolbachik Fissure Basalt Eruption, Kamchatka (2012-2013)	Evgeny I Gordeev, Valery A Droznin, Anna O Volynets, Other	Yaroslav D Muravyev
July 24 Poster	4W_4D-P9	Geology and eruptive history of the Asama-Maekake volcano, central Japan, as a clue to the long-term prediction of volcanic hazards.	Masaki Takahashi, Maya Yasui, Hiroyuki Takemoto, Other	Masaki Takahashi
July 24 Poster	4W_4D-P10	Relationship between volcanic activity and chemical and isotopic compositions of thermal waters in Tokachidake volcano, Japan	Ryo Takahashi, Tomo Shibata, Yasuji Murayama, Other	Ryo Takahashi
July 24 Poster	4W_4D-P11	Volcano-tectonic interactions during rapid plate-boundary evolution in the Kyushu region, SW Japan.	Sue H Mahony, Laura M Wallace, Masaya Miyoshi, Other	Sue H Mahony
July 24 Poster	4W_4D-P12	Dry and wet debris avalanche deposits at Mt Meru volcano, Tanzania.	Audray Delcamp, Ben van Wyk de Vries, Matthieu Kervyn	Audray Delcamp
July 24 Poster	4W_4D-P13	Building a flood hydrograph caused by the volcanic eruption of Baekdusan in Cheon-ji caldera lake	Khil-Ha Lee, Sung-Wook Kim, Sang-Hyun Kim, Other	Khil-Ha Lee
July 24 Poster	4W_4D-P14	Eruption History and Future Scenario of Sinabung volcano, North Sumatra, Indonesia	Mitsuhiro Yoshimoto, Setsuya Nakada, Natsumi Hokanishi, Other	Mitsuhiro Yoshimoto
July 24 Poster	4W_4D-P15	Late Holocene stratigraphic record of Gunung Agung (Bali, Indonesia): an explosive basaltic andesite volcano	Karen Fontijn, Igan Sutawidjaja, Chris Newhall	Karen Fontijn
July 24 Poster	4W_4D-P16	Late Quaternary tephrostratigraphic record of Siete Lagos region, South-Central Chile	Karen Fontijn, Harriet Rawson, David M Pyle, Other	Karen Fontijn
July 24 Poster	4W_4D-P17	Volcanic hazard estimation using tephra GIS and geo-spatial information	Mamoru Koarai, Takehiko Suzuki	Mamoru Koarai
July 24 Poster	4W_4D-P18	Gravity change and crustal deformation in active Tokachi-dake volcano, Hokkaido, Japan	Noritoshi Okazaki, Wataru Hirose, Ryo Takahashi, Other	Noritoshi Okazaki
July 24 Poster	4W_4D-P19	Tiltmeter observation in Klyuchevskaya volcano, Kamchatka, Russia	Hiroaki Takahashi, Hiroki Miyamachi, Takeshi Matsushima, Other	Hiroaki Takahashi
July 24 Poster	4W_4D-P20	Near real-time hazard assessment during the 2011-2012 eruption of Puyehue-Cordon Caulle volcano, Southern Chile.	Alvaro Amigo, Luis E Lara, Daniel Bertin, Other	Alvaro Amigo
July 24 Poster	4W_4D-P21	Oblique photogrammetry system for real-time monitoring of volcanic activity	Hisashi Sasaki, Kenichi Arai, Shigenori Fujimaki, Other	Hisashi Sasaki

4H. Databases in volcanology**Poster Presentation July 24 Core Time (13:30-15:00)**

July 24 Poster	4W_4H-P1	Failure forecasting in real-time: a forecasting model testing centre for capturing and sharing data and models	Rosa Filgueira, Malcolm P Atkinson, Andrew F Bell, Other	Ian G Main
July 24 Poster	4W_4H-P2	Quantifying the intensity of unrest: introducing the Volcanic Unrest Index (VUI)	Sally H Potter, Brad J Scott, Gill E Jolly, Other	Sally H Potter
July 24 Poster	4W_4H-P3	TephraProb: a user-friendly toolbox for the hazard assessment of ground tephra accumulation	Sebastien Biass, Costanza Bonadonna	Sebastien Biass
July 24 Poster	4W_4H-P4	Introduction to Using WOVodat	Christina Widiwijayanti, Antonius Ratdomopurbo, Chris Newhall, Other	Christina Widiwijayanti
July 24 Poster	4W_4H-P5	PHIVOLCS-VDAS: Adaptation of the wovodat schema for the volcano monitoring records of the Philippine	Maricel Capa, Mary Jane Catapang, Antonius Ratdomopurbo, Other	Maricel Capa
July 24 Poster	4W_4H-P6	Japan's Volcanic Disaster Mitigation Initiatives: Work Projects of the Commission on Mitigation of Volcanic Disasters, VSJ and Volcanic Hazard Maps in Japan, 2nd Edition	Yoichi Nakamura, Toshikazu Tanada, Eisuke Fujita, Other	Yoichi Nakamura
July 24 Poster	4W_4H-P7	Estimating volcano hazard and exposure in the Lesser Antilles	Michal Camejo, Richard Robertson	Michal Camejo
July 24 Poster	4W_4H-P8	A quantitative assessment of Holocene explosive eruption records: Applications to Eastern Pacific and Caribbean volcanic arcs	Michal Camejo	Michal Camejo
July 24 Poster	4W_4H-P9	Volcanoes of Kurile-Kamchatka Islands Arc information system	Iraida M. Romanova, Olga A. Girina, Alexander P. Maximov, Other	Ivan V. Melekestsev

July 24 Poster	4W_4H-P10	IVS FEB RAS Geoportal for integration and increasing availability of volcanological data	Iraida M. Romanova	Iraida M. Romanova
July 24 Poster	4W_4H-P11	Volcanoes of Japan (Third edition) , a compiled map, published in 2013	Shun Nakano, Kuniaki Nishiki, Shinji Takarada, Other	Kuniaki Nishiki
4I. Education and Geoparks				
Poster Presentation July 24 Core Time (13:30-15:00)				
July 24 Poster	4W_4I-P1	The center for Diffusion and Enlightenment of Volcanic Hazard and Risk Education on Fuji Volcano Disaster Prevention; attempt of Fuji Volcano Disaster Prevention Information Center	Takashi Uchiyama, Shinya Yamamoto, Akiho Kasai	Takashi Uchiyama
July 24 Poster	4W_4I-P2	Collaboretion Program of "Hokkaido Volcano Summit", Japan	Shin Ito, Rika Hishimura, Hiromu Okada, Other	Shin Ito
July 24 Poster	4W_4I-P3	Progress Report on the Hokkaido JICA program (2009-present) on Improvement of Mitigation and Management Ability of Volcanic Disasters for the Central and South America.	Hiromu Okada, Minoru Kobayashi, Rika Hishimura, Other	Shin Ito
July 24 Poster	4W_4I-P4	Publication of Toya Caldera and Usu Volcano Global Geopark Guide Series	Tadahide Ui, Hiromu Okada, Nizaemon Kagaya, Other	Tadahide Ui
July 24 Poster	4W_4I-P5	Sustainable development of Toya-Usu Global Geopark and creating safety culture at Usu volcano, Japan - through the activities by Mimatsu Museum and Sobetsu Information Center	Saburo Mimatsu, Hiromu Okada	Hiromu Okada
July 24 Poster	4W_4I-P6	30 years-long activity of Sobetsu Kids Program at Usu Volcano, Japan	Toshiya Tanabe, Saburo Mimatsu, Tsutomu Sato, Other	Hiromu Okada
July 24 Poster	4W_4I-P7	Let's make Shikaribetsu lake by yourself: geopark lecture in Shikaoi elementary school	Shintaro Hayashi	Shintaro Hayashi
July 24 Poster	4W_4I-P8	Characteristics of hot spring water and carbonate deposit from the Obama hot spring in the Unzen Volcanic Area Global Geopark	Kei Ikehata	Kei Ikehata
July 24 Poster	4W_4I-P9	The Shinmoedake Eruption of 2011, Kirishima Volcano and Activities of Kirishima Geopark	Ryusuke Imura	Ryusuke Imura
July 24 Poster	4W_4I-P10	Geopark investigation and geoeducation research initiatives: an example from the proposed Banks Peninsula geopark	Samuel J Hampton, Darren M Gravley	Samuel J Hampton
July 24 Poster	4W_4I-P11	Volcano Geoparks and the 5th International UNESCO Conference on Geoparks	Setsuya Nakada	Setsuya Nakada

Contents of Program and Abstracts USB Memory

IAVCEI 2013 Program and Abstracts

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Special Contents

Guidebook of Pre/Post-Conference Field Trips IAVCEI 2013 - Bulletin of the Volcanological Society of Japan, vol. 58, no. 2, CD book (2013)

A1. Calderas and active volcanoes in central to eastern Hokkaido.

A2. Unzen and Aso volcanoes, central Kyushu, Japan: Unzen's new lava dome climb and 1991-95 pyroclastic flows and Aso's active crater and one of the largest calderas in Japan.

A3. Suwanosejima - Lighthouse of East China Sea: Ongoing strombolian activity and proximal facies of the 1813 eruption.

B1. Active volcanoes in Northeast Japan.

B2. Active volcano in Central Japan: Asama Volcano.

B3. Fuji and Hakone Volcanoes: Typical stratovolcanoes in Japan.

B4. Basaltic and rhyolitic island volcanoes in Izu Islands.

B5. Kirishima, Sakurajima Volcanoes and their source calderas in Southern Kyushu.

B6. Kikai caldera and southern Kyushu: Products of a large silicic magmatic system.

B8. Changbaishan volcano, the magnificent gift from the nature.

Special: First results from the 2012-13 Tolbachik fissure eruption.

Sakurajima Special Issue - Bulletin of the Volcanological Society of Japan, vol. 58, no. 1 (2013)

The Volcanological Society of Japan (VSJ) has published regular bulletins and special memorial issues on topics of significant eruptions, such as the 1983 Miyakejima, 1986 Izu-Oshima, and 2000 Usu eruptions. Although we have had no opportunity to comprehensively share the vast recent scientific activities of the Sakurajima volcano, we realize this is the best time to begin the publication process of such scientific achievements. During the centennial year of the 1914 eruption and at the Scientific Assembly of International Association of Volcanology and Chemistry of Earth Interior in July 2013 in Kagoshima, Japan, a special section on the Sakurajima volcano will be published in this tri-monthly bulletin of VSJ. This specialized section will be composed of a review, 19 articles and a frontispiece. These will cover the magmatic evolution based on chemistry, geology on historical eruptions, ground deformation after the 1914 eruption, recent eruptive activity at the Showa crater investigated from various points of view, structure of the volcano and the caldera, and methodology for data analysis.

National Catalogue of the Active Volcanoes in Japan (4th edition) - Japan Meteorological Agency & Volcanological Society of Japan

The Japan Meteorological Agency (JMA) has edited, revised and issued "National Catalogue of the Active Volcanoes in Japan" since 1975. Reflecting progress of volcano researches and services of volcanic disaster mitigation after the issuance of the 3rd edition of the catalogue in March 2005, JMA compiled and issued the 4th edition of the Japanese catalogue in March 2013. JMA would like to distribute its digital English version by taking the opportunity of IAVCEI 2013 in Kagoshima.

The catalogue of the active volcanoes in Japan contains not only overview of active volcanoes in Japan (i.e. distribution of active volcanoes, topography, list of active volcanoes and history of volcanic disasters), but also detailed information on each 110 active volcanoes in Japan such as volcanological knowledge (geological map, history of eruptive phenomena, details of significant eruptions, precursors seen before eruptions and recent volcanic activities), volcanic disaster mitigation (table of Volcanic Alert Levels and volcanic hazard map), social condition (population, belonging national/quasi national park and related institutions) and others (i.e. distribution of observation instruments and references).

JMA has collected lots of materials and advice from volcanologists all over the Japan including members of the Coordinating Committee for Prediction of Volcanic Eruption Working Group, as well as lots of opinion from experts on various fields of volcano researches, to enhance contents of the catalogue.

On the occasion of holding the IAVCEI Scientific Assembly at Kagoshima, JMA and the Volcanological Society of Japan published English version of this catalogue.

Land Condition Map of Volcano (Sakurajima) - Geospatial Information Authority of Japan

The Geospatial Information Authority of Japan (GSI) assumes responsibility for geodetic surveys in active volcanoes and preparation of volcano maps such as "Volcanic Base Map" and "Land Condition Map of Volcano."

"Land Condition Map of Volcano" provides basic information for predicting volcanic damage, formulating disaster prevention measures, and so on. They depict, in an easily-to-understand format, the distribution of landforms formed by past volcanic activities, erupted substances (lava and pyroclastic flows, scoria cones, debris avalanches, etc.), disaster prevention facilities and organizations, relief and safety facilities, structure for river flow control, tourist facilities, and other

pertinent information. In addition, the backs of the maps provide a description and brief history of the volcano. Land Condition Map of Volcano with such features can be used not just for formulating disaster prevention measures; they also provide basic information for formulating earthquake disaster measures, land use and preservation plans, as well as all types of surveys, studies, and training. They can also be used to get pertinent information about local communities, rural areas, and sightseeing spots, among other things. The Land Condition Map of Volcano has been being prepared since 1988, and has been issued for 16 volcanoes so far. The map of Sakurajima was published in 1989, the scale of this map sheet is 1:15,000, and size is 841mm x 1189mm, 10 colors at right side, 1 color at reverse side.

Mt. Sakurajima volcano is the most active volcanoes. The volcano erupted a big scale of Pyroclastic flows in the northern part of the Kagoshima Bay and the present Mt. Sakurajima volcano has been developing and forming a composite strato volcano in the south fringe of the Aira Caldera. Mt. Sakurajima has three craters at the top of the mountain, and three peaks. The Minamidake peak is the newest one and it has been erupting still in the present remarkably. At the mountain foots, various lava flows are distributed which the year of eruption are well known, which are Bunmei lava flow (1471-1476), An-ei lava flow (1779), Taisho lava flow (1914), Showa lava flow (1946) and another kinds of lava flows, which years of eruption are not known, are also can be seen. These are distributed from mountain slopes to the coast. There are many flank volcanoes at the mountain slopes. Remarkably well developed alluvial fan at the volcanic cone is seen in the northwest of the island. By the eruption in 1914, the volcano island was connected with the main land by tremendous volume of lava flow. The Minamidake peak has been continuing eruption.

Volcanic Hazard Maps of Japan (2nd edition) - National Research Institute for Earth Science and Disaster Prevention

The Commission on Mitigation of Volcanic Disasters of the Volcanological Society of Japan (VSJ) had been investigating effective methods for developing the best suited mitigating systems for volcanic disasters in Japan. Also, the Disaster Information Laboratory of the National Research Institute for Earth Science and Disaster Prevention (NIED) had been working on efficient ways to collect and disseminate disaster prevention related materials and information resources. Working together, these two organizations developed a volcanic hazard map database that provides basic information resources to local government authorities, disaster mitigation organizations, and researchers who are concerned with volcanic hazards. After building on these collaborations, the first edition of the Volcanic Hazard Maps of Japan (on two DVDs) was published in 2006, followed by an English supplemental DVD (on a single disk) in 2007. In addition, the NIED made the database system of volcanic hazard maps widely available to the public by putting up an online version on their website, which they regularly update as new information becomes available. Since the first edition of the Volcanic Hazard Maps of Japan was published six years ago, the Japan Meteorological Agency (JMA) has revised the number of active volcanoes upward from 108 to 110, and the new Volcanic Warning and Volcanic Alert Levels System has been incorporated into many areas near active volcanoes. Several hazard maps have therefore been revised by local governments, and numerous publications with new information have been published.

The second edition of Volcanic Hazard Maps of Japan was planned and has now been released with new updated content, based on recent studies and reviews by national agencies, disaster management organizations and commissions, and local governments, some of which have faced volcanic threats in the recent past. We have tried to incorporate a great deal of new data about the current state of disaster management and future disaster mitigation efforts into this second edition. By including the latest version of volcanic hazard maps and other relevant information resources, we hope that the recent initiatives and information coming out from local governments, other relevant organizations and agencies, media organizations, volcanologists and disaster mitigation scientists will be put to widespread use in developing even better ways of mitigating volcanic disasters in Japan.

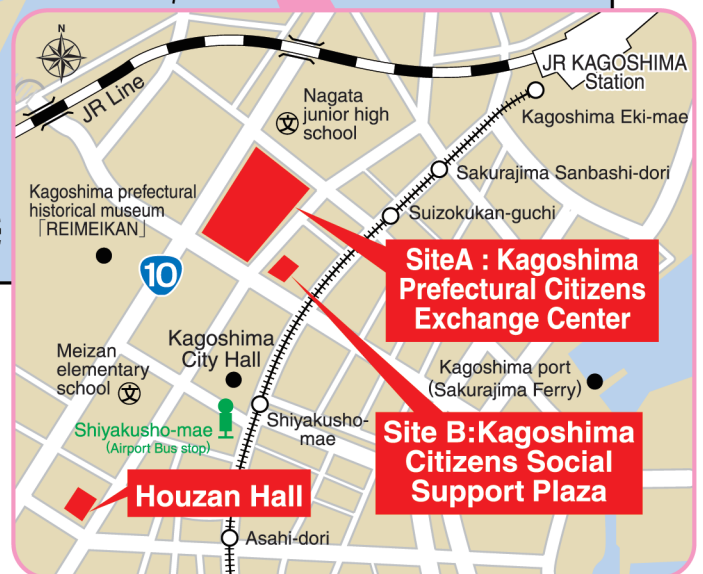
Video "Sakurajima" - Committee for making Volcano Video "Sakurajima" (2010)

- 1) Activities of Sakurajima volcano.
 - 2) Observation and study for the last 50 years.
 - 3) Preparations for big eruptions that may occur in the near future.
- Produced and copyrighted by Committee for making Volcano Video "Sakurajima".
Quick Time Player is necessary to play the video. 18 minutes, 405MB.

EPS Special Volume on Shinmoe-dake (Kirishima) eruption

An open-access, special issue on "Shinmoe-dake eruption in 2011 - an example of less-frequent magmatic activity-", which includes 18 scientific papers, was published in "Earth, Planets and Space" (TERRAPUB) (Vol. 65, No. 6, 2013; <http://www.terrapub.co.jp/journals/EPS/toc/6506.html>).

Kagoshima City Map



【Hotel List】

1	Hotel Shiroyama Kagoshima	6	Chisun Inn Kagoshima	11	Hotel Hokke Club Kagoshima
2	Richmond Hotel Kagoshima Kinseicho	7	BlueWave Inn Kagoshima	12	SOLARIA NISHITETSU HOTEL KAGOSHIMA
3	HOTEL SUNFLEX KAGOSHIMA	8	KAGOSHIMA PLAZA HOTEL TENMONKAN	13	KAGOSHIMA TOKYU INN
4	remm KAGOSHIMA	9	Kagoshima Washington Hotel Plaza	14	HOTEL TAISEI ANNEX
5	Toyoko Inn Kagoshima Tenmonkan No2	10	Hotel Lexton Kagoshima	15	Kagoshima Sun Royal Hotel