

Volcanes y Sociedad  
Ciudades en volcanes **12**  
Cities on Volcanoes  
Volcanoes and Society

PROGRAMA DE SESIONES  
SESSION PROGRAM

La Antigua, Guatemala, 11–17 febrero 2024





# Bienvenid@ a Cities on Volcanoes 12

**En este programa encontrarás:**

**Mapa de La Antigua Guatemala**

**Mapa de los salones del Hotel Porta**

**Listado de excursiones**

**Listado de talleres**

**El programa resumido de sesiones**

**El programa completo de sesiones, charlas y posters**

*El programa de esta conferencia no habría sido posible sin el esfuerzo de cada persona que envió un resumen, cada organizador(a) y co-organizador(a) de sesión, el comité asesor de programa, todos los organizadores de talleres y excursiones, el comité organizador local, todas las personas que supervisan o dirigen proyectos que logran que las cosas pasen, panelistas, conferencistas de paneles de plenaria, cineastas y artistas. Todas y todos quienes han formado parte de esto, incluyendo comunidades en Guatemala, instituciones nacionales y universidades alrededor del mundo, así como patrocinadores que han apoyado estos esfuerzos.*

***¡Disfruta la conferencia!***

**Equipo Organizador de Programa**

**Pablo Forte, Lizzette Rodriguez, Eliza Calder, Beatriz Cosenza**



# **Welcome to Cities on Volcanoes 12**

**In this program you will find:**

**Map of La Antigua Guatemala**

**Map of Porta Hotel Rooms**

**List of field trips**

**List of workshops**

**The Summary Session Program**

**The Full Session Talk and Poster Program**

*The program of this conference would not have been possible without the effort of each person who submitted an abstract, each session convenor and co-convenor, the program advisory committee, all the workshop and field trip organisers, the local organising committee, all the supervisors and project leads that make things happen, all the panelists, plenary panel speakers, the film-makers and artists, all those who have come to Antigua to be part of this conference including those from communities in Guatemala, national institutions and universities around the world, as well as the funders who have supported these efforts.*

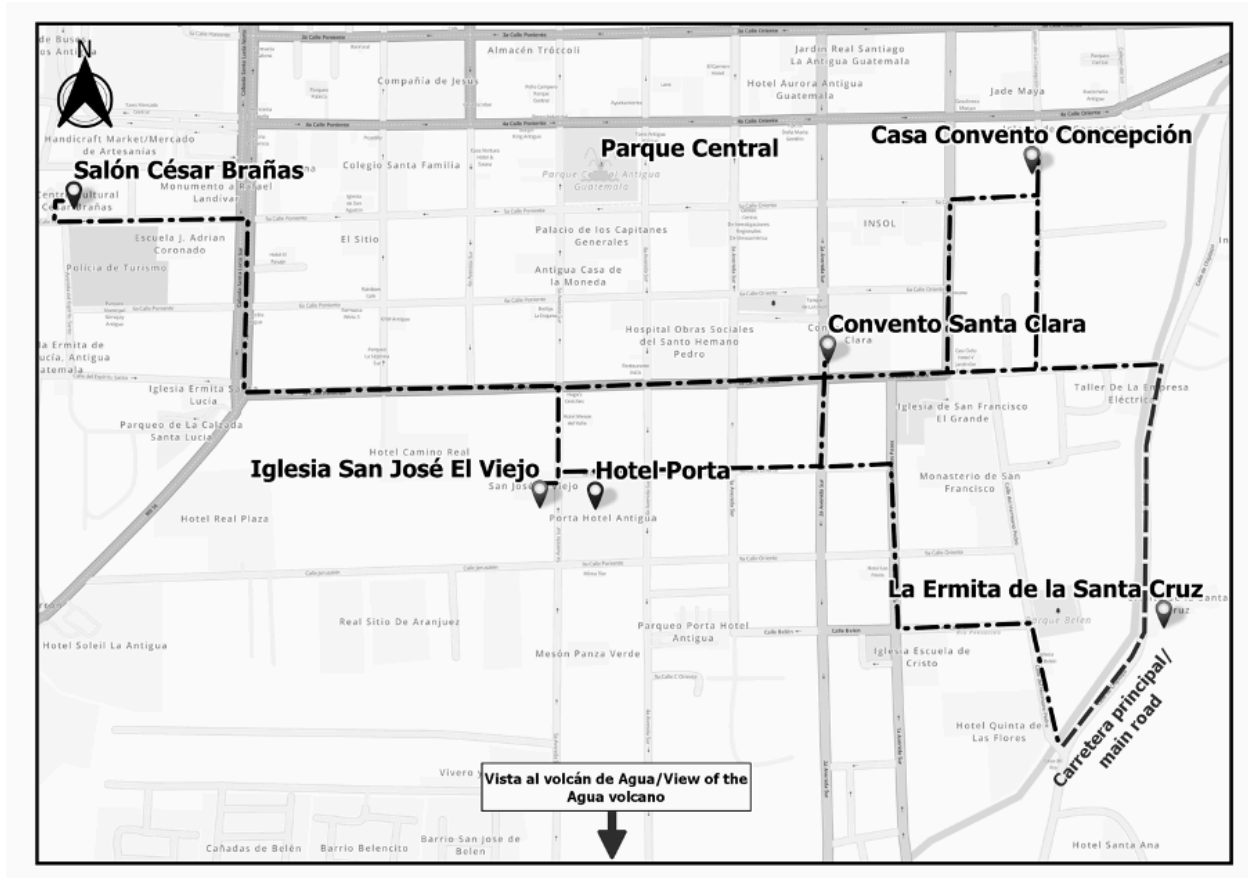
***Enjoy the conference !***

**Program Organising Team**

**Pablo Forte, Lizzette Rodriguez, Eliza Calder, Beatriz Cosenza**

**Map of the locations around the City of La Antigua, Guatemala that will be used for conference activities**

**Mapa de sitios en la ciudad de La Antigua Guatemala que serán utilizados para actividades de la conferencia.**

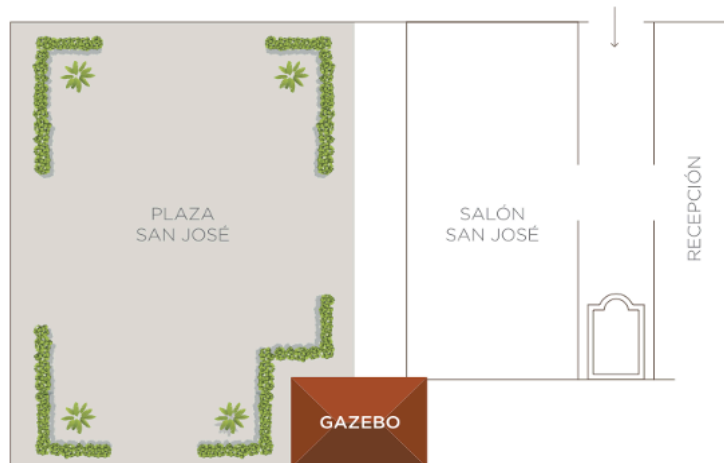


## Porta Hotel spaces to be used for conference activities

### MAPAS DE UBICACIÓN



8A CALLE



Mesón del Obispo

### Excursiones de campo COVID12

Se ofrecieron varias excursiones antes y después de la conferencia, incluyendo diversos aspectos de los volcanes: riesgo, estudios de erupciones, geoturismo, entre otros, en diferentes ubicaciones tanto en Guatemala como en países vecinos (Nicaragua, El Salvador y México).

No.	Excursión	Fecha	Participantes	Organizador
1	Volcanismo activo y volcán-tectónica, Nicaragua	07 al 10	5 a 12	Diana Roman
2	Historia eruptiva, amenazas y patrimonio cultural; Volcán de Atitlán, Guatemala	07 al 10	10 a 15	Rafael Torres-Orozco
3	Perspectivas diversas del Volcán de Fuego, Guatemala	08 al 10	5 a 30	Matt Watson
4	Impacto de la erupción Pliniana de 1982 – gestión del riesgo futuro; El Chichón, México	08 al 10	8 a 20	Nick Varley
5	Santiago Atitlán – Cultura, Riesgo and Reubicación	18 al 23	Hasta 30	Eliza Calder, Thomas McKean
6	Explorando nuevas rutas geoturísticas Moyuta-Tecuamburro-Pacaya. Cultura, historia y geoquímica de fluidos	18 al 20	10 a 25	María Graciela Olmos
7	Gestión de riesgo volcánico en El Salvador; desde las geociencias, planificación territorial, y el fortalecimiento de los sistemas de alerta temprana centrados en los usuarios	17 al 20	10 a 15	Jacqueline Rivera
8	La erupción del volcán de Fuego de junio de 2018: cronología, depósitos, impactos, peligros y riesgos asociados	17	Hasta 20	Sylvain Charbonnier
9	Erupción de Fuego – noches en las plataformas de Acatenango	3 opciones	Hasta 30 por noche	Jeff Johnson / Armando Pineda

### Field trips COV12

Various field trips have been offered, both before and after the conference, covering various aspects of volcanoes: risk, eruption studies, geotourism, amongst others, at different locations both in Guatemala and neighboring countries (Nicaragua, El Salvador, and Mexico).

No.	Excursion	Dates	Participants	Organizer
1	Active volcanism and volcano-tectonics, Nicaragua	07 to 10	5 to 12	Diana Roman
2	Eruption history, hazards & cultural heritage; Volcán de Atitlán, Guatemala	07 to 10	10 to 15	Rafael Torres-Orozco
3	Diverse perspectives of Volcán de Fuego, Guatemala	08 to 10	5 to 30	Matt Watson
4	Impact of the 1982 Plinian eruption – future risk management; El Chichón, Mexico	08 to 10	8 to 20	Nick Varley
5	Santiago Atitlán – Culture, Risk and Resettlement	18 to 23	Up to 30	Eliza Calder, Thomas McKean
6	Exploring New Geotourism Routes: Moyuta-Tecuamburro-Pacaya. Culture, History, and Fluid Geochemistry	18 to 20	10 to 25	Maria Graciela Olmos
7	Volcanic Risk Management in El Salvador: from geosciences to territorial planning and the strengthening of user-centered early warning systems	17 to 20	10 to 15	Jacqueline Rivera
8	The June 2018 eruption of Fuego volcano: chronology, deposits, impacts, associated hazards and risks	17	Up to 20	Sylvain Charbonnier
9	Fuego Eruption Overnight at the Acatenango Platforms	3 options	Up to 30 per night	Jeff Johnson / Armando Pineda

## Workshops

<b>Talleres pre-congreso / Pre-conference workshops – Domingo / Sunday 11/02/24</b>					
<b>Duración/Duration: Medio día / Half day (9am - 1pm <i>or</i> 2pm - 6pm) – Día completo / Full day (9am - 6pm); Lugar/Place: Hotel Porta</b>					
Código Code	Duración Duration	Salón Room	Título – Tema principal Title - Main theme	Participante s Participants (min-max)	Organizador(a) del taller Workshop organizer
Pre-1	Half day (9am - 1pm)	Dña. Luisa (35)	Best practices for making the most of UAVs at volcanoes: from science and monitoring to art	15-20	Jerry Mock Boise State University jerrymock@u.boisestate.edu
Pre-2	Half day (2pm - 6pm)	Don Pedro (35)	Volcanes y su contexto social, cultural y político	20-30	Dario Andrés Gómez Cabrera gestiondelriesgo@pasto.gov.co
Pre-3	Half day (9am - 1pm)	Don Pedro (35)	Métodos Cualitativos para la Gestión Integral de Riesgos	10-30	Miryam Ortiz Osornio Universidad Autónoma de la Ciudad de México miryam.ortiz@uacm.edu.mx
Pre-4	Half day (2pm - 6pm)	Dña. Luisa (35)	Finding resonance: Building an IAVCEI Commission on Indigenous People and Volcanology	10 - 20	Jonathan Procter Massey University j.n.procter@massey.ac.nz
Pre-5	Half day or Full day (optional)	Salón San José (100)	Reflexiones sobre la intervención en las comunidades con el conocimiento científico de los volcanes y mitos sobre las acciones de preparación previo a erupciones	20 -30	Liliana P. Troncoso Salgado Universidad Central del Ecuador lptroncoso@uce.edu.ec
Pre-12			Sharing lessons from working alongside communities at risk from volcanic eruptions: where are we now and how can we improve	15 -60	Jenni Barclay University of East Anglia J.Barclay@uea.ac.uk
Pre-6	Half day (9am - 1pm)	El Obispo (60)	Exploring communication strategies between volcano observatories and international partners	10 - 50	Kadie Bennis Smithsonian Institution bennisk@si.edu



Pre-7	Half day (2pm - 6pm)	El Obispo (60)	Experiences in preparing for and responding to the health impacts of volcanic eruptions in Latin America: Story sharing and information exchange	20 - 30	David Damby US Geological Survey ddamby@usgs.gov (IVHHN and ALVO)
Pre-11	Full day	La Cueva (35)	Volcanic impact and risk modelling using the open-source RiskScape engine: an introductory workshop	10 -25	Josh Hayes GNS Science j.hayes@gns.cri.nz
<b>Talleres pre-congreso / Pre-conference workshops</b>					
<b>Exterior / Outdoors</b>					
Pre-14	Half day (from 2 pm)	Dña. Beatriz	Fotografía Volcánica	10-18	Hernando A. Rivera Cervantes y Diego Rizzo riveracervanteshernando@gmail.com
Pre-15	Half day (9 am – 1 pm)	Meeting at Porta Hotel Hall	Taller de Pintura de Volcanes de Guatemala	15-30	Alejandra Reiche Cola de Quetzal coladequetzalguatemala@gmail.com
<b>Talleres intra-congreso / Intra-conference workshops</b>					
<b>Hotel Porta</b>					
Intra-1	Start Sunday 11/02/24 & All week	Gardens in Hotel Porta & other locations	Volcanology Oral History Project	10-50	Benjamin J. Andrews Smithsonian Institution Global Volcanism Program andrewsb@si.edu
Intra-2	14/02/24 (6pm – 8:30pm)	Salón San José (100)	IV Encuentro de Jóvenes Volcanólogos Latinoamericanos (JVLA)	25-50	Joali Paredes-Mariño The University of Auckland joa.paredes.marino@auckland.ac.nz
Intra-3 (Pre-10)	15/02/24 (6:30pm – 8:30pm)	Salón San José (100)	CERG-C Specialization Certificate on Geological and Climate-Related Risk: Reflecting on past, present and future international collaborations on volcanic risk reduction	5 - 30	Costanza Bonadonna Univesitée of Geneve costanza.bonadonna@unige.ch (CERG-C and ALVO)

<b>Talleres post-congreso / Post-conference workshops – Sábado / Saturday 17/02/23</b>					
<b>Hotel Porta: Medio día /Half day (9am -1pm) – Día completo / Full day (9am - 6pm)</b>					
Post-1	Half day (9am - 1pm)	Dña. Beatriz (35)	Introduction to the Volcanology Infrastructure for Computational Resources and Tools (VICTOR)	10-20	Einat Lev Lamont-Doherty Earth Observatory einatlev@ideo.columbia.edu
Post-2	Full day	Dña. Luisa (35)	From the laboratory to the natural scale in debris flows hazard modeling: the challenge of upscaling	10-20	Lizeth Caballero UNAM lcaballero@encit.unam.mx
Post-3	Full day	Mesón del Obispo (60)	Identifying priorities and opportunities for advancing knowledge of volcanic airborne emission impacts to societies, environments, and economies	10-35	Natalia Deligne USGS Hawaiian Volcano Observatory ndeligne@usgs.gov
Post-4	Full day	El Obispo (60)	Developing a Volcano Early Warning System for Guatemala	15-40	Matthew Watson University of Bristol matt.watson@bristol.ac.uk
Post-7	Half day	Don Pedro (35)	Periodismo en emergencias	10-35	Sharon Backhouse GeoTenerife sharonbackhouse@geotenerife.com
<b>Post-conference workshops - Saturday 17/02/23 and Sunday 18/02/23</b>					
<b>Centro de Formación de la cooperación española en La Antigua Guatemala (9am - 5pm)</b>					
Post-5	2 days	CF de la Cooperación Española en Antigua	III Encuentro de Observatorios Vulcanológicos de Latinoamérica	15 - 40	Daniel Bertin Sernageomin, Chile daniel.bertin.u@gmail.com (ALVO, INSIVUMEH, USGS-VDAP)

Si no te inscribiste a ningún taller, **considera participar en los talleres intra-congreso y post-congreso**. Los talleres intra-congreso son gratuitos. Si son de tu interés, contacta a los organizadores. Los talleres post-congreso tienen un costo de registro de 80 quetzales (10 US\$), que podrás abonar el mismo día de la actividad, antes de su inicio. Si son de tu interés, por favor escribe un correo a [cov12workshops@gmail.com](mailto:cov12workshops@gmail.com).

If you did not register for any workshop, **consider participating in the intra- and post-conference workshops**. Intra-conference workshops are free (contact the organizers). Post-conference workshops have a registration cost of 80 quetzales (10 US\$), which you can pay on the day of the activity, before it starts. If you are interested, please write an email to [cov12workshops@gmail.com](mailto:cov12workshops@gmail.com).

**Programa de noches de actividades culturales/  
Evening program of cultural activities**

**Lunes 12 de febrero/ Monday February 12  
*La Ermita de la Santa Cruz 7pm – 9pm***

**Presentación de libro sobre volcanes y geología por Sam Bonis:** Samuel Bonis es geólogo y vulcanólogo estadounidense, y ha vivido en Guatemala durante varios años. Bonis, Otto Bohemberger y Gabriel Dengo publicaron el primer mapa geológico de Guatemala.

**Presentación musical de Na'ik Madera** Es un grupo musical de mujeres formado desde principios del 2003. Su música se caracteriza por ser alternativa, y hacer uso de gran diversidad de ritmos latinoamericanos, en su mayoría

**Presentation of book on volcanoes and geology by Sam Bonis:**

Samuel Bonis is an American geologist and volcanologist, and has lived in Guatemala for several years. Bonis, Otto Bohemberger and Gabriel Dengo published the first geological map of Guatemala.

**Musical presentation by Na'ik Madera**

This is a musical group of women formed since the beginning of 2003. Their music is characterized by being alternative, and making use of a great diversity of Latin American rhythms

**Martes 13 de febrero/ Tuesday February 13  
*Convento de Santa Clara- 6:30pm-9pm***

**Exposición de fotografías en contextos volcánicos**, durante esta exposición se presentarán fotografías seleccionadas las cuales fueron enviadas por diversos entusiastas de la fotografía en contextos volcánicos, busca plasmar el arte, la sociedad y cultura en entornos volcánicos. Este evento estará amenizado por *Electrocuerdas*, agrupación que hace una fusión entre lo clásico y moderno. Cuenta con un repertorio de música electrónica, pop y 80's, en violín y viola eléctrica.

**Exhibition of photographs in volcanic contexts**, during this exhibition selected photographs will be presented which were sent by various photography enthusiasts in volcanic contexts, seeking to capture art, society and culture in volcanic environments. This event will be entertained by the *Electrocuerdas*, a music group that makes a fusion between classic and modern. It has a repertoire of electronic, pop and 80's music, on violin and electric viola.

**Jueves 15 de febrero/ Thursday February 15  
*Hotel Porta 7pm-9:30pm***

**Cine rotativo:** dentro de esta actividad se busca explorar temas sobre los desafíos y oportunidades en contextos volcánicos. Trata de tener un acercamiento a historias desarrolladas en ambientes volcánicos que sean un puente de comunicación entre una diversidad de perspectivas. Se estará presentando en salones diversos cortometrajes.

**Rotating cinema:** within this activity we seek to explore topics about the challenges and opportunities in volcanic contexts. Try to have an approach to stories developed in volcanic environments that are a bridge of communication between a diversity of perspectives. Various short films will be presented in theaters.

## Plenary Sessions/Sesiones de plenaria

The plenary sessions will walk us through a story told in four chapters.

The invited speakers and their contributions might emphasize knowledge brought by their experience in Guatemala, or further afield in Latin America, but the issues are applicable widely.

Las sesiones plenarias nos llevarán a través de una historia contada en cuatro capítulos. Las y los oradores invitados y sus contribuciones pueden enfatizar el conocimiento adquirido por sus experiencias en Guatemala o, más aún, en Latinoamérica, pero los asuntos son extrapolables ampliamente a otras regiones del mundo.

Monday 12 Feb: ***Volcanology in Latin America; Shaping the Horizon***

***Volcanología en América Latina; Dando forma al Horizonte***

**Marta Calvache**, Servicio Geológico Colombiano, SGC (retired).

**Gustavo Chigna**, INSIVUMEH, Guatemala.

**Andrew Lockart**, Volcano Disaster Assistance Program, USGS (retired).

**Mariana Patricia Jácome Paz**, Instituto de Geofísica, UNAM, Mexico.

Introducer & discussant: **Pablo Forte**, Servicio Geológico Minero Argentino, SEGEMAR

Tuesday 13 Feb: ***Risk and disaster scholarship in Latin America***

***Cúmulo de conocimientos sobre riesgo y desastres en América Latina***

**Irasema Alcántara-Ayala**, Instituto de Geografía, UNAM, México.

**Alex Guerra**, Instituto Privado de Investigación sobre Cambio Climático (ICC), Guatemala.

**Wotzbely Suarez**, CONRED, Guatemala.

Introducer & discussant: **Lizzette Rodriguez**, Universidad de Puerto Rico en Mayagüez

Thursday 15 Feb: ***Community and Indigenous voices in Disaster Risk Reduction***

***Voces indígenas y de la comunidad en la reducción de riesgo de desastre***

**Alex Petzey**, Community researcher, Santiago Atitlán, Guatemala.

**Christine Kenney**, Professor of Disaster Risk Reduction at Massey University, New Zealand.

**Clyornique Williams**, Community researcher, Fancy, St. Vincent.

**Edy Maldonado**, CONRED, Guatemala.

Introducer & discussant: **Eliza Calder**, University of Edinburgh, UK.

Friday 16 Feb: ***Participatory and Transdisciplinary work related to Disaster Risk Reduction***

***Trabajos participativos y transdisciplinarios en relación a la reducción de riesgo de desastre***

**Margarita Kenefic**, Scriptwriter and actress, Casa de Producción, Guatemala.

**Eliza Calder**, Professor of Volcanology, University of Edinburgh, UK.

**Rudiger Escobar-Wolf**, Associate Professor, Michigan Technological University

Introducer & discussant: **Teresa Armijos**, University of Edinburgh, UK.

## Cities on Volcanoes 12 Program



<b>Themes</b>	<b>1. Volcanoes and sustainable development</b>	<b>2. Volcanoes, the humanities and creative Arts</b>	<b>3. Volcanoes and their social, cultural, and political context</b>	<b>4. From volcano monitoring and hazard assessment to risk management</b>
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### Monday, February 12

8.00-10.00	<b>Centro Cultural César Brañas Inaguration and Opening Ceremony (Open to public)</b> <b>Plenary Session 1: Volcanology in Latin America: Shaping the Horizon</b> <b>Marta Calvache, Gustavo Chigna, Andrew Lockart, Mariana Patricia Jácome Paz</b>
10.00-11:00	<b>Walk to Porta Hotel and Coffee Break</b>

<b>Porta Hotel - Room</b>					
	Landívar	San José	Obispo	Mesón del Obispo	Iglesia San José
11.00-11.30	<b>404.</b> Recent developments in understanding explosive eruptions from direct observations, erupted products, and modeling, with hazard and risk applications	<b>307.</b> Women on and around volcanoes: Care in the community	<b>412.</b> Volcano slope instability and its products: from debris remobilization to cascading hazard	<b>108.</b> Co-existing with Active Volcanoes: facing Hazards, Challenges, and Opportunities	<b>409.</b> Multi-scale and multi-parametric geodetic monitoring and modeling for studying and forecasting volcanic activity
11.30-12.00					Scenes from film - The Colour of Ash and discussion with director M. Prince
12.00-12.30					
12.30-13.00					
13.00-14.00	<b>Lunch</b>				
14.00-14.30	<b>Poster Session (Plaza San José) &amp; Coffee</b>				
14.30-15.00	<b>404.</b> Recent developments in understanding explosive eruptions from direct observations, erupted products, and modeling, with hazard and risk applications	<b>302.</b> Creating "volcano-ready" communities: communicating for resilience and response	<b>420.</b> Lessons from recent eruptions and other crises	<b>109.</b> Co-production of risk management in volcanic contexts: supporting equitable knowledge and power relations	<b>409.</b> Multi-scale and multi-parametric geodetic monitoring and modeling for studying and forecasting volcanic activity
15.00-15.30					
15.30-16.00					
16.00-16.30	<b>Coffee Break and Posters</b>				
16.30-17.00	<b>411.</b> Tourism in suddenly erupting volcanoes: the hazards and risk of phreatic eruptions	<b>312.</b> Social volcanology: Exploring the role of social science in support of volcano observatories and civil protection	<b>420.</b> Lessons from recent eruptions and other crises	<b>402.</b> Identifying evolutive patterns of distributed volcanism, implications for hazard and risk assessment	<b>406.</b> Decoupling in Pyroclastic Density Currents: Monitoring, Mapping, Hazards, Impacts, Risks
17.00-17.30					
17.30-18.30	<b>Poster session (Plaza San José)</b>				
19.00-21.00	<b>Cultural activity: Sam Bonis book presentation followed by Na'ik Madera concert</b> <b>La Ermita de Santa Cruz</b>				



**Tuesday, February 13**

8.00 - 9.30	<b>Centro Cultural César Brañas (Open to public)</b> <b>Plenary Session 2: Risk and disaster scholarship in Latin America</b> <b>Irasema Alcántara-Ayala, Alex Guerra, Wotzbely Suarez</b>				
9.30-10.30	<b>Walk to Porta Hotel and Coffee Break</b>				
	<b>Porta Hotel - Room</b>				
	<b>Landívar</b>	<b>San José</b>	<b>Obispo</b>	<b>Mesón del Obispo</b>	<b>Iglesia San José</b>
10.30-11.00	<b>403.</b> Multidisciplinary investigations to unravel the structure and dynamics of active volcanic systems	<b>103.</b> Volcano geology and mapping for hazard assessment, risk and resource-management, and building cultural value of the territory	<b>410.</b> Shallow submarine and marine-emergent volcanism: Marine tephra, physical processes, risks, response, and monitoring	<b>418.</b> Health hazards associated with volcanic emissions: quantifying emissions, assessing exposure, and informing mitigation	<b>304.</b> Towards ethnovolcanology in Latin America: Plural perceptions of volcanism, place attachment and disaster risk in ancestral volcanic lands
11.00-11.30					
11.30-12.00					
12.00-12.30			<b>407.</b> Evaluating secondary volcanic hazards: methodologies, recent advances and still open questions		
12.30-13.00				<b>433.</b> Technological innovation for scientific outreach and teaching among communities (...)	
13.00-14.00	<b>Lunch</b>				
14.00-14.30	<b>Poster Session (Plaza San José) &amp; Coffee</b>				
14.30-15.00	<b>403.</b> Multidisciplinary investigations to unravel the structure and dynamics of active (...)	<b>104.</b> Ciencia justa, comunidades equitables e inclusivas: sesión conmemorativa a Martha Navarro Collado	<b>417.</b> Forecasting volcanic hazards: new technologies and probabilistic multi-source and multi-hazard assessment combining HPC and field data	<b>313.</b> From Communities to Calderas: historical reconstructions of volcanic eruptions and risk	<b>414.</b> Evaluación de la amenaza volcánica en América Latina: métodos innovadores y oportunidades para las estrategias de reducción del riesgo y la transferencia de conocimiento
15.00-15.30	<b>401.</b> Temporal and Spatial Evolution of the Internal Structure of Active Volcanic Systems				
15.30-16.00					
16.00-16.30	<b>Coffee Break and Posters</b>				
16.30-17.00	<b>401.</b> Temporal and Spatial Evolution of the Internal Structure of Active Volcanic Systems		<b>417.</b> Forecasting volcanic hazards: new technologies and probabilistic multi-source and multi-hazard assessment combining HPC and field data	Scenes from film - The Colour of Ash and discussion with director M. Prince	<b>414.</b> Evaluación de la amenaza volcánica en América Latina: métodos innovadores y oportunidades para las estrategias (...)
17.00-17.30					
17.30-18.30	<b>Poster session (Plaza San José)</b>				
18:30 - 20:00		<b>ECR Mentoring session</b>			
18:30 - 21:00	<b>Cultural activity: Photo exhibition and live music (Convento de Santa Clara)</b>				

## Thursday, February 15

8.00 - 9.30	<b>Centro Cultural César Brañas (Open to public)</b> <b>Plenary Session 3: Community and Indigenous voices in Disaster Risk Reduction</b> <b>Alex Petzey, Christine Kenney, Clyornique Williams, Edy Maldonado</b>				
9.30-10.30	<b>Walk to Porta Hotel and Coffee Break</b>				
	<b>Porta Hotel - Room</b>				
	<b>Landivar</b>	<b>San José</b>	<b>Obispo</b>	<b>Mesón del Obispo</b>	<b>Doña Luisa</b>
10.30-11.00	427. Stakeholder needs: Communication for decision-making during crises	311. Making the magic happen: methods and case studies for interdisciplinary knowledge exchange in volcanic risk	416. Volcano databases: integrating citizen science with observatory needs and powering communication and education strategies		309. Facts, Faith and Function: Exploring the role of spirituality and faith-based organisations in volcanic risk communication and management
11.00-11.30				203. "Fire up a mountain and nobody there to put it out" – Living with Volcanoes in Song, Story, Poetry, and Music	
11.30-12.00					
12.00-12.30	429. "Can everyone understand us?": Communicating risk to vulnerable populations in volcanic areas		413. New methodologies for volcanic hazard and risk assessments		102. Suelos volcánicos: desafíos para su protección y conservación sustentable
12.30-13.00					
13.00-14.00	<b>COV Outreach Exchange</b>		<b>Lunch</b>		
14.00-14.30	<b>Poster Session (Plaza San José) &amp; Coffee</b>				
14.30-15.00	429. "Can everyone understand us?": Communicating risk to vulnerable (...)	303. The Indigenous voice in volcanology: seeking pathways towards co-production of knowledge	413. New methodologies for volcanic hazard and risk assessments	205. Beyond hazard maps? Exploring methods, media and the map-making process to consider new opportunities in map making practices and their alignment with DRR	
15.00-15.30	430. Communication is tuff: Conveying challenging topics in volcanology		419. Volcanic emission impacts to societies, environments, and economies: From forecasting to informing resilience-building actions		
15.30-16.00	428. Un pilar prioritario en la gestión del riesgo - la comunicación				
16.00-16.30	<b>Coffee Break and Posters</b>				
16.30-17.00	428. Un pilar prioritario en la gestión del riesgo - la comunicación	407. Evaluating secondary volcanic hazards: methodologies, recent advances and still open questions	419. Volcanic emission impacts to societies, environments, and economies: From forecasting to informing resilience-building actions	202. Eruption! The (Re) mediation of Volcanoes in Film, Media and Popular Culture	
17.00-17.30					
17.30-18.30	<b>Poster session (Plaza San José)</b>				
18:30-21:00		<b>CERG-C workshop:</b> Reflecting on past, present and future international collaborations on volcanic risk reduction		<i>Fire up a mountain (cont). Open Music Session. Rainbow cafe</i>	
19:00 - 21:00	<b>Cultural activity: Cinema Night (Porta Hotel)</b>				

**Friday, February 16**

<b>Porta Hotel - Room</b>						
	<b>Landívar</b>	<b>San José</b>	<b>Obispo</b>	<b>Mesón del Obispo</b>	<b>Doña Luisa</b>	<b>Don Pedro</b>
8.00-8.30						
8.30-9.00	<b>405.</b> Deciphering magmatic processes and eruptive triggering at open conduit volcanoes: multidisciplinary approaches for hazard assessment and risk mitigation	<b>107.</b> Whose Mountain is it Anyway? Volcanoes, Knowledge, and Tourism	<b>426.</b> The role of the non-governmental associations and organizations in the reduction of volcanic risk	<b>308.</b> Imaginaries, perceptions and narratives of living in volcanic environments	<b>301.</b> Living with Volcanoes – what are your concerns?	
9.00-9.30						
9.30-10.00					<b>423.</b> Long-term engagement and interaction between civil authorities and (...)	
10.00-10.30	<b>Coffee Break</b>					
10.30-11.00	<b>405.</b> Deciphering magmatic processes and eruptive triggering at open conduit volcanoes: multidisciplinary approaches for hazard assessment and risk mitigation	<b>106.</b> Taking Information Exchange to the Next Level: Using Park Interpretation Methods to Enhance Your Science Communication	<b>423.</b> Long-term engagement and interaction between civil authorities and volcano observatories: opportunities and lessons learnt	<b>305.</b> Relationships with the red zone	<b>201.</b> "Rapsodia telúrica", un cortometraje sobre música contemporánea e infrasonidos volcánicos	<b>204.</b> Festival of volcanic art: a dialogue of knowledges inspired by volcanoes
11.00-11.30						
11.30-12.00	<b>408.</b> From ground to space: Observations and modelling of volcanic gas and ash emissions for eruption forecasting and hazard and environmental impact assessment	<b>105.</b> Geodiversity in volcanic areas – New approaches to define, measure and promote volcano diversity and their implication for geohazard resilience and geocultural aspects	<b>424.</b> Scientific - operational interface in volcanic crisis management: integrating national and international contributions	<b>306.</b> Communities on the move: understanding the resettlement processes after a disaster	<b>431.</b> Volcanic warnings for all: How can we translate warnings and alerts in the context of a multi-hazard, technologically driven, diverse global community?	
12.00-12.30						
12.30-13.00						
13.00-14.00	<b>Lunch</b>		<b>CAV Commission Mtg</b>	<b>Lunch</b>		
14.00-14.30	<b>408.</b> From ground to space: Observations and modelling of volcanic gas and ash emissions for eruption forecasting and hazard and environmental impact assessment	<b>105.</b> Geodiversity in volcanic areas – New approaches to define, measure and promote volcano diversity and their implication for geohazard resilience and geocultural aspects	<b>421.</b> ¿Por qué siguen muriendo personas en zonas de alto riesgo volcánico?: Barreras cognitivas, institucionales y en el territorio (...)	<b>314.</b> La educación en ambientes volcánicos y riesgos, una necesidad impostergable		
14.30-15.00						
15:30-16:00	<b>Walk to La Ermita de Santa Cruz</b>					
16.00-18.00	<p><b>La Ermita - Plenary Session 4: Participatory and Transdisciplinary work related to Disaster Risk Reduction (Open to Public)</b></p> <p><b>Margarita Kenefic, Rudiger Escobar-Wolf, Eliza Calder.</b></p> <p><b>Cities on Volcanoes 12 closing ceremony</b></p>					
19:00 - 22:30	<b>Final Closing Party (Cervecería 14)</b>					

**Mid-Conference Field Trip 14 Feb/Excursión a mitad de la Conferencia: Pacaya***Basaltic volcanism at Pacaya volcano/ Volcanismo basáltico en el volcán de Pacaya*

**Leaders/ Líderes:** William Chigna (CONRED), Gustavo Chigna (INSIVUMEH), Greg Waite (Michigan Technological University), Matthew Watson (University of Bristol), Matthew Purvis (GeoTravel Guatemala), John Lyons (USGS).

**Location(s)/Ubicaciones:** El Rodeo lava flows and the MacKenney cone of Pacaya volcano/ Flujos de lava de El Rodeo y el cono MacKenney del volcán Pacaya.

**Goals:**

- To learn about Pacaya's recent eruptive history and to understand the role of the tectonic setting on Pacaya's eruptive styles.
- To observe Pacaya's recent lava flows and understand how the crisis was handled by government agencies.
- To consider the various hazards that Pacaya volcano presents

**Objetivos:**

- Aprender sobre la historia eruptiva reciente de Pacaya y comprender el papel del entorno tectónico en los estilos eruptivos de Pacaya.
- Observar los recientes flujos de lava del Volcán de Pacaya y comprender cómo las agencias gubernamentales manejaron la crisis.
- Considerar los diversos peligros que presenta el Volcán de Pacaya

**Itinerary:**

<b>Activity / Actividad</b>	<b>Approximate time/ Tiempo aproximado</b>	<b>Objective/ Objetivos</b>
Drive to El Rodeo (stop one) Conducir a El Rodeo (parada uno)	90 minutes	Drive to stop one Conducir hacia parada uno
El Rodeo	45 minutes	Learn about the recent eruptive sequence, the recent lava flow field and hazard response from civil protection.  Aprenda sobre la secuencia eruptiva reciente, el campo de flujo de lava reciente y la respuesta al peligro de protección civil.
Drive to trail head Conducir hasta el comienzo del sendero	40 minutes	Drive to stop two Conducir hacia parada dos
Hike to Cerro Chino (stop two)  Caminata al Cerro Chino (parada dos)	275 minutes	Discussion about the recent history of Pacaya, its eruptive products and the influence of the tectonic setting on activity and degassing.  Discusión sobre la historia reciente de Pacaya, sus productos eruptivos y la influencia del entorno tectónico en la actividad y desgasificación.
Drive to Antigua Viaje de regreso a Antigua	90 minutes	Return to Antigua Regreso a la Antigua Guatemala

**Mid-Conference Field Trip 14 Feb/Excursión a mitad de la Conferencia: Fuego**

*Peligros volcánicos de los volcanes de Agua y Fuego*

**Leaders/ Líderes:** William Chigna (CONRED), Gustavo Chigna (INSIVUMEH), John Lyons (USGS), Matthew Watson (Universidad of Bristol), Greg Waite (Universidad Tecnológica de Michigan), Matthew Purvis (GeoTravel Guatemala).

**Location(s)/Ubicaciones:** Ciudad Vieja, La Reunión golf resort y San Miguel Los Lotes / Ciudad Vieja, La Reunion golf resort and San Miguel Los Lotes

**Goals**

- To learn about Fuego’s recent eruptive history with a focus on the June 3<sup>rd</sup> 2018 eruption.
- To learn how a mudslide in 1541 impacted the first colonial capital of Guatemala.
- To understand how volcanic hazards from Guatemala’s stratovolcanoes impact local communities.

**Objetivos:**

- Para conocer la historia eruptiva reciente de Fuego con foco en el 3 de junio de 2018.
- Conocer cómo un deslizamiento de tierra en 1541 impactó a la primera capital colonial de Guatemala.
- Comprender cómo los peligros volcánicos de los estratovolcanes de Guatemala impactan a las comunidades locales.

**Itinerary:**

<b>Activity / Actividad</b>	<b>Approximate time/ Tiempo aproximado</b>	<b>Objective/ Objetivos</b>
Drive to Ciudad Vieja (stop one) Conducir para Ciudad Vieja (parada uno)	15 minutes	Drive to stop one Conducir hacia parada uno
Ciudad Vieja Ciudad Vieja	60 minutes	Learn about the 1541 mudslide that destroyed the first colonial capital of Guatemala, and the fate of Doña Beartz. Aprende sobre el alud de lodo de 1541 que destruyó la primera capital colonial de Guatemala y el destino de Doña Beatriz de la Cueva.
Drive to La Reunion (stop two) Conducir para La Reunión (parada dos)	25 minutes	Drive to stop two Conducir para parada dos
La Reunion La Reunión	30 minutes	Discuss the events of June 3 <sup>rd</sup> from the perspective of the La Reunion golf course, where a successful evacuation took place. Discutir los eventos del 3 de junio desde la perspectiva del campo de golf La Reunión, donde se llevó a cabo una evacuación exitosa.
Drive to PDC breakout (stop three)	10 minutes	Drive to stop three Conducir hacia parada tres



Conducir para el mirador (parada tres)		
PDC breakout PDC salida	45 minutes	A short walk to a point on the edge of the Las Lajas at the point where one of the final pulses exited, followed by a discussion about the June 3 <sup>rd</sup> event. Una caminata corta hasta un punto en el borde de Las Lajas en el punto donde salía uno de los pulsos finales, seguido de una discusión sobre el evento del 3 de junio.
Drive to San Miguel Los Lotes (stop four) Conducir para San Miguel Los Lotes (parada cuatro)	5 minutes	Drive to stop four Conducir hacia parada cuatro
San Miguel Los Lotes San Miguel Los Lotes	30 minutes	A walk through the town of Las Lajas, the site where many hundreds of people were killed by a pyroclastic flow on June 3 <sup>rd</sup> . Un paseo por el pueblo de Las Lajas, el sitio donde cientos de personas murieron por un flujo piroclástico el 3 de junio.
Drive back to Antigua Viaje de regreso a Antigua	40 minutes	Return to Antigua Retorno a la Antigua Guatemala

Last update: 05/02/24

Cities on Volcanoes 12 Program



Themes	1. Volcanoes and sustainable development	2. Volcanoes, the humanities and creative Arts	3. Volcanoes and their social, cultural, and political context	4. From volcano monitoring and hazard assessment to risk management
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Monday, February 12

<b>8:00-10:00</b>	<p><b>Centro Cultural César Brañas Inaguration and Opening Ceremony (Open to public)</b></p> <p><b>Plenary Session 1: Volcanology in Latin America: Shaping the Horizon</b></p> <p><b>Marta Calvache, Gustavo Chigna, Andrew Lockart, Mariana Patricia Jácome Paz</b></p>
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Room Landivar

<b>11:00 - 13:00</b>	<p><b>404. Recent developments in understanding explosive eruptions from direct observations, erupted products, and modeling, with hazard and risk applications</b></p>
Abstract ID	<p><i>Format: Oral presentations (8 + 2 min); *Invited talks (12 + 3 min)</i></p>
120	<p><b>Estratigrafía y reinterpretación de la erupción pliniana que dio origen a la "Pómez Citlaltépetl", volcán Pico de Orizaba, México</b>  <i>M. N. Vásquez-Montoya, R. Torres-Orozco, J. L. Arce, K. Sieron, F. Córdoba-Montiel</i></p>
627	<p><b>Determination of Pozo del Carmen volcano (San Luis Potosí, Mexico) vent by using QTA methodology.</b>  <i>L. A. Rodríguez Sedano, S. Rodríguez, E. Guadalupe, D. Sarocchi, R. Saucedo, A. Alatorre Pineda, M. Guerrero Hernández, L. Calderón Coronado</i></p>
263	<p><b>*Lessons from ash: a review on traces of fragmentation retrieved from pyroclasts at arc volcanoes</b>  <i>N. Pardo</i></p>
339	<p><b>Shape parameter measurements of tephra samples from grayscale images of individual particles using Dynamic Image Analysis</b>  <i>K. Takishita, T. Miwa, M. Nagai, S. Nakada, T. Suzuki</i></p>
420	<p><b>Shape-size dependence of in-flight volcanic bombs</b>  <i>A. Sork, B. Kennedy, R. Fitzgerald, L. Watson, J. Taddeucci, M. Sellier, C. Biensan, P. Scarlato, D. Andronico, T. Ricci</i></p>
517	<p><b>The long and winding fragmentation of mafic magmas</b>  <i>J. Taddeucci, C. Cimarelli, M. Manga, P. Scarlato</i></p>
150	<p><b>The ~5 ka Jamapa Pyroclastic Flow, an example of magma mixing triggering eruption at Citlaltépetl volcano, eastern Trans-Mexican Volcanic Belt</b>  <i>J. L. Arce, M. González, J. L. Macías, R. Torres-Orozco</i></p>
195	<p><b>Unravelling the dynamics and hazards of the June 3rd, 2018, pyroclastic density currents at Fuego volcano (Guatemala)</b>  <i>S. J. Charbonnier, L. A. Rodríguez, K. Ayala, S. Cancel, R. Escobar-Wolf, G. Chigna, C. Chun-Quinillo, D. Gonzalez, W. Chigna, K. Chun-Quinillo, R. Merida, F. Juarez, E. S. Calder</i></p>
194	<p><b>Using ash aggregates to constrain the timing of pyroclastic density currents during the April 2021 eruption of Soufriere, St Vincent</b>  <i>P.D. Cole, A. Halls, J. Barclay, R.E.A. Robertson</i></p>
76	<p><b>Dynamics and sedimentation from experimental plumes</b>  <i>B. J. Andrews</i></p>
776	<p><b>*Effect of fluidization in increasing run-out distance of granular flows for different aspect ratio collapsing columns</b>  <i>A. Aravena, T. Dubois, L. Chupin, O. Roche</i></p>

**13:00 - 14:00** **Lunch**

**14:00 - 14:30** **Poster Session (Plaza San José) & Coffee**

<b>14:30 - 15:30</b>	<p><b>404. Recent developments in understanding explosive eruptions from direct observations, erupted products, and modeling, with hazard and risk applications</b></p>
Abstract ID	<p><i>Format: Oral presentations (8 + 2 min)</i></p>
206	<p><b>New evidence of the Upper Pleistocene directed blast, Popocatepetl volcano, México</b>  <i>R. M. Lira-Beltrán, L. Caballero García, D. Sourisseau, G. Ruíz, G. A. Lerner</i></p>
588	<p><b>The impact of the 2021 eruption of Cumbre Vieja volcano (La Palma, Canary Islands) on the landscape: morphological changes and related hazards from UAS surveys</b>  <i>R. Civico, T. Ricci, U. Küppers, M. Schmid, V. Ortega-Ramos, I. Cabrera-Pérez, P. Scarlato, L. D'Auria</i></p>
246	<p><b>Erupción Morfo Azul: una nueva perspectiva de las implicaciones de la amenaza del volcán de Santa Ana en El Salvador.</b>  <i>D.U. Lemus Flores, C. Harpel, A. V. García Lara, J. Y. Rivera Ayala</i></p>
60	<p><b>Seismic sequence and explosion seismoacoustics of the 2018-2023 phreatomagmatic eruption of Semisopchnoi volcano, Alaska</b>  <i>J. Lyons, D. Tan, A. Hotovec-Ellis, A. Iezzi, T. Lopez, M. Haney, D. Fee</i></p>
513	<p><b>Monitoring volcanoes of the world with IMS infrasound network: evaluation of the reliability of a new detection algorithm</b>  <i>D. Gheri, E. Marchetti, G. Belli</i></p>

15:30 - 16:00		411. Tourism in suddenly erupting volcanoes: the hazards and risk of phreatic eruptions
Abstract ID	<i>Format: Oral presentations (12 + 3 min)</i>	
520	<b>Historical small-scale phreatic eruptions at Milos Island (Greece) as seen from geological and archaeological investigations</b> <i>R. Sulpizio, F. Lucchi, S. Massaro, J. Natale, M. Roverato, C. Tranne, G. Vougioukalakis, F. Lucci, G. Ventrucci, M. Zucchi, P. Pantou</i>	
182	<b>Stratigraphy of the prehistoric-historical hydrothermal crater field of Nisyros (Dodecanese archipelago, Greece): insights for hazard evaluation in a touristic geosite</b> <i>F. Lucchi, S. Massaro, J. Natale, M. Roverato, R. Sulpizio, C. A. Tranne, G. Vougioukalakis</i>	

16:00 - 16:30 **Coffee Break and Posters**

16:30 - 17:30		411. Tourism in suddenly erupting volcanoes: the hazards and risk of phreatic eruptions
Abstract ID	<i>Format: Oral presentations (12 + 3 min); *Invited talk</i>	
563	<b>Recent unrest at Campi Flegrei caldera increases the potential for a phreatic/hydrothermal explosive event</b> <i>R. Isaia, M. G. Di Giuseppe, A. Troiano, J. Natale, S. Vitale</i>	
325	<b>Dynamics and hazard of phreatic explosions at Vulcano Island (Aeolian archipelago, Italy)</b> <i>S. Giansante, T. E. Ongaro, R. Cioni, M. de Michieli Vitturi, M. Pistolesi</i>	
99	<b>Estimation of vapor mass at the sources of long-period seismic events for risk assessment of phreatic eruption</b> <i>M. Nakano, H. Kumaga</i>	
188	<b>*The fatal Whakaari/White Island December 9, 2019 eruption: an independent review</b> <i>G. Thompson, M. Rodgers, J. Braunmiller, R. Malservisi, S. R. McNutt</i>	

17:30 - 18:30 **Poster Session (Plaza San José)**

**Room San José**

11:00 - 12:30		307. Women on and around volcanoes: Care in the community
	<i>Format: Round table discussion</i>	
	Panelists: Eliza Calder, Jenni Barclay, Jan Lindsay, Marta Calvache, Norma Beltrán, Carmen Soledad Azurdía, Liliana Argueta	

13:00 - 14:00 **Lunch**

14:00 - 14:30 **Poster Session (Plaza San José) & Coffee**

14:30 - 16:00		302. Creating “volcano-ready” communities: communicating for resilience and response
Abstract ID	<i>Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (4 min); Group discussion</i>	
56	<b>Community Resilience is improved by increasing mental health awareness and providing tools and training for scientists and first responders</b> <i>H. Weiss-Racine</i>	
387	<b>IG-EPN's efforts to help prepare Ecuadorian society for volcanic events</b> <i>B. Bernard, M. Córdova, M. Encalada Simbaña, S. Hidalgo, P. Ramón, E. Telenchana</i>	
676	<b>Raising long-term awareness of volcanic risk among the younger generation: an example of transdisciplinary initiatives in Goma (DR Congo)</b> <i>C. Michellier, I. B. Mutazihara, Y. N. Kahashi, S. Mossoux, B. M. Nyandwi, M. Kervyn, F. Kervyn</i>	
11	<b>⚡ Farmers' perceptions of options for pasture remediation and recovery following major tephra fall in New Zealand</b> <i>S. P. Sivarajan, J. M. Lindsay, S. J. Cronin, T. M. Wilson</i>	
37	<b>⚡ Our home is a volcano? Responding to volcanic unrest and building community awareness in American Samoa</b> <i>N. J. Deligne, D. T. Downs, E. Lutu-McMoore, J. Allan, J. C. Chang, K. Hon, K. Langkilde, H. Malala, T. Meredith, K. Mulliken</i>	
615	<b>⚡ Forecast-based Early Actions (FbEA) on Volcanic Hazards: Systematic Review on Related Research at Merapi Volcano, Indonesia</b> <i>F. Lutfiananda, R. Lukafiardi, A. Widyaningrum, E. Calder, M. B. F. Bisri, S. Loughlin, E. Hussain</i>	
	<b>Group discussion (30 min)</b>	

16:00 - 16:30 **Coffee Break and Posters**

16:30 - 17:30		312. Social volcanology: Exploring the role of social science in support of volcano observatories and civil protection
Abstract ID	Format: ⚡ Lightning talks (7 min); *Invited talks; Group discussion	
715	⚡ *Understanding volcano communication needs over time: A case study from Aotearoa New Zealand <i>J. Becker, D. Charlton, S. Potter, B. Scott, E. E.H. Doyle, M. Das, J. Krippner, C. Stewart, G. Leonard, K. Tapuke, D. Johnston, M. Clive, L. Vinnell, H. Gabrielson, C. Miller, N. Fournier, S. McBride</i>	
646	⚡ *Ten recommendations for volcanic risk communication: lessons learned from a volcanic crisis and communicating high-impact risks. <i>L. Manj, S. Edwards, A. Chau</i>	
501	⚡ Tourists' perception of volcanic hazards and volcanic risk in Tenerife Island <i>C. Rodríguez-Pérez, A. Quezada Ugalde, G. Chelli, G. James, K. Rahli, D Rodríguez, J. G. Cantero, B. C. Coldwell, C. Solana, F. Rodríguez, N. M. Pérez</i>	
748	⚡ Better together: management of the 2018-2019 Pteroa volcano eruptive crisis through the lens of interdiscipline <i>P. Forte, L. de Abrantes, A. Ramirez</i>	
718	⚡ Connecting volcanoes and people: The role of social scientists at New Zealand's volcano observatory <i>S. Potter, D. Charlton, G. Leonard, N. Fournier, J. Becker</i>	
Group discussion (20 min)		

17:30 - 18:30 Poster Session (Plaza San José)

Room Obispo

11:00 - 13:00		412. Volcano slope instability and its products: from debris remobilization to cascading hazard
Abstract ID	Format: Oral presentations (12 min); *Invited talk (16 min); Group discussion	
128	*Volcanic Debris Avalanches: the last major volcanoclastic process to be recognized <i>M. Roverato</i>	
298	Compositional systematics in volcanic flank collapse deposits off Fogo (Cape Verde): Origin and emplacement processes <i>J. M. Scheffler, S. Kutterolf, S. Krastel, E. Hadré, R. Ramalho, A. Klügel, J. Schenk</i>	
334	The relationship between volcano growth, eruption style and instability at Anak Krakatau, Indonesia, and implications for future hazards <i>K. Meredew, S.F.L. Watt, M. Cassidy, A.F. Shomim, M.E.M. Nurshal, M. Abdurrahman, M. Hanif, S.L. Engwell, V.C. Smith, C.M. Petrone, C.T.E. Stevenson</i>	
97	Cascading volcanic hazards of collapsed mafic volcanoes: an overview of the types and timescales of magmatic response <i>J.E. Romero</i>	
295	Insights into the Rheological Weakening of Erodible Substrates and the Implications for Continuum Modelling of Bulking in Geophysical Flows <i>C. Elías Parra, E.C.P. Breard</i>	
156	Inter-eruptive lahars at El Chichón Volcano (Mexico): susceptibility analysis and numerical modeling <i>O. Cruz-Vázquez, L. Capra</i>	
450	Rheological characterization of lahar interstitial fluid from Popocatepetl volcano, Mexico. <i>C. Tranquilino, L. Caballero, M. F. Guzmán, D. Sarocchi, F. Dioguardi</i>	
Group discussion (20 min)		

13:00 - 14:00 Lunch

14:00 - 14:30 Poster Session (Plaza San José) & Coffee

14:30 - 16:00		420. Lessons from recent eruptions and other crises
Abstract ID	Format: Oral presentations (8 + 2 min) & *(12 + 3 min); ⚡ Lightning talks (5 min); Panel discussion	
692	Crisis eruptiva de la erupción del volcán de Fuego del 03 de junio del 2018 <i>G. A. Chigna Marroquín, D. M. González Domínguez, C. M. Chun Quinillo</i>	
642	⚡ Evacuation decision-making processes and challenges at Fuego volcano, Guatemala <i>B. Bartel, R. Escobar Wolf, A. Naismith, I. M. Watson</i>	
580	Respuesta ante crisis eruptivas del volcán de Fuego <i>W. Chigna, C. Chun</i>	
241	⚡ The 2023 volcanic crisis at Nevado del Ruiz Volcano, Colombia <i>L. M. Castaño, J. Makario Londoño</i>	
373	*Coordinación efectiva en la respuesta a la crisis del volcán Nevado del Ruiz (Colombia) en 2023 <i>L. Sánchez, L. C. Barreto, S. Mendoza, O. A. Arenas, J. C. Rodríguez, M. Buitrago Salinas</i>	
256	⚡ Preparación Comunitaria para la Respuesta ante una posible Erupción del Volcán Nevado del Ruiz <i>L. Dorado, M. Buitrago, E. Armenta, A. Álvarez</i>	
38	*The 2021 eruption in La Palma Island (Canary Islands, Spain): an example of the synergy that is needed between Science and Decision-makers <i>S. Melettidis, IGN Volcano Monitoring Group</i>	

168	⚡ <b>Compound impacts from lava and tephra on buildings during the 2021 Tajogaite eruption of Cumbre Vieja, La Palma, Spain</b> <i>S. Biass, M.P. Reyes-Hardy, C. Gregg, L. Di Maio, L. Dominguez, C. Frischknecht, C. Bonadonna, N. Perez</i>
372	<b>*Comunicación del riesgo volcánico: lecciones aprendidas de las últimas alertas volcánicas en Argentina</b> <i>G. Jara Aburto, S. Garcia, P. Forte, G. Badi, S. Osoros</i>
152	⚡ <b>Challenge and Success in Volcanic Assistance by the USGS-USAID Volcano Disaster Assistance Program</b> <i>J. Lowenstern, VDAP Team</i>

16:00 - 16:30 **Coffee Break and Posters**

16:30 - 17:00	<b>420. Lessons from recent eruptions and other crises</b>
	<i>Panel discussion (30 min)</i>
	<b>Panelists: Gustavo Chigna Marroquin, Lina Dorado, Stavros Meletlidis, Barry Periat, Jake Lowenstern</b>

17:30 - 18:30 **Poster Session (Plaza San José)**

**Room Mesón del Obispo**

11:00 - 13:00	<b>108. Co-existing with Active Volcanoes: facing Hazards, Challenges, and Opportunities</b>
Abstract ID	<i>Format: Oral presentations (12 + 3 min); *Invited talk</i>
66	<b>Cities near volcanoes: the threat of volcanic hazards on expanding cities</b> <i>E.S. Meredith, R.X.N. Teng, S.F. Jenkins, J.L. Hayes, S. Biass, E. Tennant</i>
184	<b>*Stromboli, challenges and opportunities as a tourist destination</b> <i>A. Lotteri, V. Kennedy, K. Crawford, D. Andronico, E. Nicotra, M. Schmid</i>
254	<b>The 2021 crisis at La Fossa Volcano: a case study of volcanic gas emissions near the inhabited zone of Vulcano Island, Italy</b> <i>R.M.R. Di Martino, S. Gurrieri, M. Camarda</i>
477	<b>Catastrophe Bonds as a tool for efficient risk transfer and disaster relief</b> <i>K. Strehlow, N. Adler, A. Bornstein, C. Edmonds, M. Hanzich, A. Marti, J. M. Maurel, C. Rosas, L. Sousa, O. Tuinenburg</i>
41	<b>How many people are exposed to volcanic eruptions? Updating the VPI and PEI</b> <i>N. I. Deligne, S. F. Jenkins, E. Venzke, B. J. Andrews, S.K. Brown, E.S. Meredith, R.S.J. Sparks</i>
592	<b>*Evaluación de la percepción del peligro volcánico del Misti en la población de la ciudad de Arequipa</b> <i>L. Macedo Franco, I. Lazarte Zerpa, M.C. Ruelas Polanco, B. Van Wyk De Vries, S. Rouquette, F. Azalgará</i>
320	<b>Nereidas Valley of Nevado del Ruiz volcano as a model of a medium to high enthalpy geothermal system in Colombia</b> <i>L.A. Botero-Gómez, H. Murcia, J.J. Sánchez, M. G. Gómez-Vasconcelos, J. López Palacio</i>
697	<b>Holocene plinian eruptions recorded in Manizales, Colombia; AMS 14C ages determination, eruptive dynamic and hazard implications</b> <i>H. Murcia, D. Ramón Avellán, K. Picón, K. Herrera, L. A. Botero-Gómez, J. Gómez-Arango</i>

14:30 - 15:30	<b>109. Co-production of risk management in volcanic contexts: supporting equitable knowledge and power relations</b>
Abstract ID	<i>Format: Oral presentations (10 + 2 min)</i>
516	<b>Challenges and successes of co-production approaches to risk management in Latin American urban and peri-urban areas</b> <i>S. Garcia Ferrari, A. Bain</i>
560	<b>Saberes comunitarios y co-producción para la gestión integral del agua y del riesgo en la cuenca del alto Atoyac</b> <i>E. Torres Samano, Y. Prieto Rivera, D. Jiménez Ramos</i>
671	<b>Estrategias Interinstitucionales de coproducción en la gestión del riesgo volcánico del volcán Nevado del Ruiz: El gran desafío después del desastre</b> <i>G.P. Cortés Jiménez, L.J. Castaño Vasco, M.L. Calvache Velasco, J. Montoya Alvis, C. Driedger, L.M. Dorado Gonzalez, J. Barclay, T. Armijos, A. Hicks</i>
344	<b>Los niños de la niebla y la alta montaña, un solo cuerpo.</b> <i>A. Velásquez Gaviña, G.P. Cortés Jiménez, L.J. Castaño Vasco</i>
276	<b>Weaving together Hazard with Ontologicity with the focus on the Risk assessment</b> <i>M. Portilla Gamboa</i>

15:30 - 16:00	<b>402. Identifying patterns of distributed volcanism, implications for hazard and risk assessment</b>
Abstract ID	<i>Format: Oral presentations (10 + 2 min); ⚡ Lightning talk (6 min)</i>
198	<b>The magmatic system of Taal Volcano, Philippines: Insights from pre- and post-eruption integrated temporal monitoring</b> <i>P.S. Cosalan, M.A. Bornas, G. Williams-Jones, B.J. Aggangan, K. Jhon Remo, P. Karson Alanis, J. De Lima, N. Pallera</i>
532	<b>How do monogenetic and polygenetic volcanoes interact near México City?</b> <i>A.L. Martín Del Pozzo, M. Sandoval, A. Nieto</i>



123	<b>Historia eruptiva de los conos de escoria de La Joya, Campo Volcánico de Xalapa, México</b> <i>Y. Ruiz-Godínez, R. Torres-Orozco, M.P. Jácome-Paz, K. Sieron, J.C. Cruz Rocha</i>
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**16:00 - 16:30** *Coffee Break and Posters*

<b>16:30 - 17:30</b>	<b>402. Identifying patterns of distributed volcanism, implications for hazard and risk assessment</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (10 + 2 min)</i>
40	<b>Evaluating pre- and syn-eruptive characteristics of distributed volcanic field eruptions: New insights into storage conditions, ascent rates, and eruption volumes</b> <i>E.R. Johnson, M. Ort, G.A. Valentine</i>
200	<b>Favorable environments for water-magma interaction: Phreatomagmatic volcanoes in the Trans-Mexican Volcanic Belt</b> <i>M.P. Schliz Antequera, C. Siebe, S. Salinas, G.A. Lerner</i>
581	<b>Monogenetic volcanism in the Valle de Santiago area, NE sector of the Michoacán-Guanajuato Volcanic Field, Mexico</b> <i>E. Rangel-Granados, C. Siebe, J.E. Suárez-Jiménez, M.P. Schliz-Antequera, N. Reyes-Guzmán, M.-N. Guilbaud, S. Salinas, D. Paul Miggins</i>
118	<b>Spatio-temporal evolution of distributed volcanic fields, case studies: Sierra Chichinautzin and Michoacán-Guanajuato, México.</b> <i>C. Jaimés-Viera, A. Nieto-Torres, A. L. Martín Del Pozzo, A. Germa, C. Connor, M. Ort, P. Layer, J. Benowitz</i>

**17:30 - 18:30** **Poster Session (Plaza San José)**

**Room Mesón del Obispo**

<b>11:00 - 12:00</b>	<b>409. Multi-scale and multi-parametric geodetic monitoring and modeling for studying and forecasting volcanic activity</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12+ 3 min)</i>
26	<b>Geodetic monitoring of the dome forming eruption at Nevado del Ruiz (Colombia)</b> <i>M. Ordoñez, J. Idárraga, M. Battaglia</i>
105	<b>Lesson learnt from the recent past to understanding the activity of a restless caldera: the case of Campi Flegrei (Italy)</b> <i>E. Trasatti, V. Acocella, C. Del Gaudio, A. Astort, C. Magri, M. Di Vito</i>
134	<b>Analysis of the lava lake and magma flows during 2023 Nyamulagira volcanic activity detected by SAR coherence variations</b> <i>M. Polcari, C. Belagizi, E. Ferrentino, S. Valado, D. Coppola, S. Salvi</i>
146	<b>Unrest Dynamics of Domuyo Volcano, Argentina: Magma influx coupled with gas diffusion as a mechanism to explain geodetic and thermal time series</b> <i>P. Lundgren, T. Girona, N. García-Martínez, M.G. Bato, Y. Zhan, C. Cardona</i>

**12:00 - 14:00** **Scenes from film - The Colour of Ash and discussion with director M. Prince**

**13:00 - 14:00** *Lunch*

**14:00 - 14:30** **Poster Session (Plaza San José) & Coffee**

<b>14:30 - 16:00</b>	<b>409. Multi-scale and multi-parametric geodetic monitoring and modeling for studying and forecasting volcanic activity</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12+ 3 min)</i>
297	<b>Is the recent uplift episode at Askja Volcano (Iceland) something to worry about?</b> <i>J. Sepúlveda, A. Hooper, S. Ebmeier, R. Bilsland, Y. Yang, M. Lazecky, C. Lanzi, M. Parks, F. Sigmundsson, E. de Z. - van Dalssen</i>
259	<b>What can we learn from the 2021 paroxysmal activity of Mount Etna? An InSAR and GNSS Ground Deformation Analysis</b> <i>A. Vásquez, F. Guglielmino, F. Cannavò, A. Bonforte, G. Puglisi</i>
360	<b>Towards a global understanding of the processes governing volcanic deformation</b> <i>C. Novoa Lizama, A. Hooper, S. Ebmeier</i>
455	<b>Noise or Signal? A Holistic Approach to GNSS-Based Volcanic Hazard Monitoring</b> <i>J. Ghent, B. Crowell</i>
639	<b>Unveiling Surface Deformation Patterns at Rincón de la Vieja Volcano: A Geodetic Study</b> <i>M.C.Araya, P. Hidalgo, H. Bakkar, C. Coto, A. Hidalgo, J. Nimblett, M. Maldonado, L. Watkin</i>

**16:00 - 16:30** *Coffee Break and Posters*

16:30 - 17:30		406. Decoupling in Pyroclastic Density Currents: Monitoring, Mapping, Hazards, Impacts, Risks
Abstract ID		<b>Format:</b> ⚡ <i>Lightning talks (6 min); Round table discussion</i>
458		⚡ <b>Fluid Entrainment, Particle Concentration and Flow Mobility in Pyroclastic Density Currents</b> <i>J. Dufek, E. Breard</i>
20		⚡ <b>Dynamic Transport of Pyroclastic Density Currents across Topographic Obstacles</b> <i>L. Corna, G. Lube, E. Brosch, D. Uhle, J. Jones</i>
549		⚡ <b>Examining Pyroclastic Density Current Rheology and Retrogressive Collapse through Granular Flow Experiments</b> <i>S. Makris, E.C.P. Breard, E. Calder, S. Charbonnier</i>
366		⚡ <b>Dynamic topography and pyroclastic density current (PDC) hazard at Volcán De Fuego, Guatemala, revealed using a multi-source digital elevation model (DEM) timeseries.</b> <i>B. Ireland, M. Watson, F. Albino, K. Wood, A. Naismith, T. Richardson, G. Chigna, R. Merida</i>
293		⚡ <b>Thermal impact of detached ash cloud surges in 79CE at Herculaneum: a lesson for PDC hazard at Vesuvius (Italy)</b> <i>A. Pensa, G. Giordano, S. Corrado, P. P. Petrone</i>
		<b>Round table discussion (30 min)</b>

17:30 - 18:30	Poster session- Plaza San José
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Abstract ID	108. Co-existing with Active Volcanoes: facing Hazards, Challenges, and Opportunities
317	<b>Geothermal exploration for the sustainable development and the energetic independence of small volcanic islands</b> <i>S. Urso, M. Viccaro</i>
508	<b>VOLRISKMAC II: Strengthening R&amp;D&amp;I capabilities for the development of resilience against volcanic emergencies in Macaronesia</b> <i>E. Padrón, P. A. Hernández, L. D'Auria, N.M. Pérez, M. Asensio-Ramos, F. Rodríguez, J. Barrancos, G.D. Padilla, G.V. Melián, R. Silva, R. Carmo Almeida, C. Silva, F. Viveiros, L. Rodríguez, A. García, C. Amonte, M. Jiménez, M.J. Pankhurst, J.M. Pacheco, S. Silva, V.I.B. Alfama, N. Cardoso</i>
704	<b>The communities around the El Chichón volcano, México: resilience and risk.</b> <i>M. P. Jácome Paz, F. Sánchez Sánchez, C. Dominguez Diaz, M. Sánchez</i>
720	<b>Built on Hot and Steaming Grounds: Copahue's Unique Soil Conditions and Urban Development</b> <i>M. C. Lamberti, P. Forte, N. Nuñez, J. Llano, S. García, F. Carbajal, A. Massenzio, L. Guerriero, D. Sierra, M. Gomez, M. Agosto</i>

Abstract ID	109. Co-production of risk management in volcanic contexts: supporting equitable knowledge and power relations
418	<b>Monitoreo de la variación de los Cauces del Volcán Santiaguito a través de Aeronave No Tripulada</b> <i>J.J. Ochoa Quezada</i>

Abstract ID	302. Creating "volcano-ready" communities: communicating for resilience and response
11	<b>Farmers' perceptions of options for pasture remediation and recovery following major tephra fall in New Zealand</b> <i>S.P. Sivarajan, J.M. Lindsay, S.J. Cronin, T.M. Wilson</i>
37	<b>Our home is a volcano? Responding to volcanic unrest and building community awareness in American Samoa</b> <i>N.I. Deligne, D.T. Downs, E. Lutu-McMoore, J. Allan, J.C. Chang, K. Hon, K. Langkilde, H. Malala, T. Meredith, K. Mulliken</i>
58	<b>Understanding the impact of gender norms to inform risk reduction efforts: Perspectives of women on evacuation at Fuego volcano, Guatemala</b> <i>B.A. Bartel, A.K. Naismith, R. Escobar Wolf</i>
70	<b>Use of residents' local language narratives of volcano eruption experiences for disaster risk communication</b> <i>M.M. Martinez-Villegas, L.C. Mercader, J.M. Viel C. Sugay, L.R.D. Sanico, X.G. Villacote, A. Domiguano, R. Lumbang, F.B.A. Gianan, M. Quintia, A.R. Loza, P. Karson Alanis</i>
121	<b>Three years, two volcanoes, six eruptions: outreach and communication strategies in Hawaii</b> <i>K. Mulliken, K. Hon, N. Deligne, W. Stovall, M. Poland, J. Ferracane, B. Hayes, T. Magno, D. Bevens, M. Decker</i>
479	<b>"Canary Islands: A volcanic window in the Atlantic Ocean" – 16 years spreading knowledge of volcanic phenomenon throughout the population of the Canary Islands</b> <i>F. Rodríguez, N.M. Pérez, C. Rodríguez, R. García-Hernández, Ó. Rodríguez, J. G. Cantero, P.A. Hernández, L. D'Auria, E. Padrón, G.V. Melián, M. Asensio-Ramos, G. D. Padilla, J. Barrancos, B.C. Coldwell</i>
615	<b>Forecast-based Early Actions (FbEA) on Volcanic Hazards: Systematic Review on Related Research at Merapi Volcano, Indonesia</b> <i>F. Lutfiananda, R. Lukafiardi, A. Widyaningrum, E. Calder, M. B. F. Bisri, S. Loughlin, E. Hussain</i>
92	<b>Congratulations! You've created a social media account. Now what?</b> <i>E. Westby, M. Poland, W. K. Stovall, J. Ball, K. Mulliken</i>

Abstract ID	402. Identifying patterns of distributed volcanism, implications for hazard and risk assessment
144	<b>El enigmático volcán Acatlán: vulcanismo complejo de pequeño volumen en el Campo Volcánico de Xalapa, México</b> <i>J. C. Cruz-Rocha, R. Torres-Orozco, K. Sieron, M. P. Jácome-Paz, Y. Ruiz-Godínez</i>
775	<b>The geochemical evolution and hazard prediction of silicic peralkaline volcanoes</b> <i>J. Kuehne, J. Wu, S. Cronin</i>

414	<b>Similarities and differences of the distributed volcanism in Los Andes Central Volcanic Zone and the Trans Mexican Volcanic Belt</b> <i>A. Nieto Torres, G. Ureta Alfaro</i>
535	<b>Transition from polygenetic to monogenetic volcanism in the southern Mexico Basin. Transición del vulcanismo poligenético al monogenético en el sur de la Cuenca de México</b> <i>M. Sandoval García, A. L. Martín Del Pozzo</i>
670	<b>"Polycyclic" volcanoes: inferences from facies analysis and internal architecture of El Carrizal diatreme, Salta Group, Cretaceous-Paleogene rift in Northwestern Argentina</b> <i>O.M. Arenas Saravia, J.M. Arnosio, E. Bustos, W.A. Báez</i>
746	<b>Newly identified monogenetic volcanoes in Antioquia, Colombia: the possibly northernmost volcanic monogenetic volcanic field of Andes Cordillera.</b> <i>Y.P. Rave-Bonilla, J. J. Sánchez, A. Germa, M. Rodgers</i>

<i>Abstract ID</i>	<b>404. Recent developments in understanding explosive eruptions from direct observations, erupted products, and modeling, with hazard and risk applications</b>
545	<b>Costa Rica: a remarkable laboratory for the study of hydrothermal eruptions and slope stability</b> <i>G. Avaró, B. Moncada Villegas, M.J. Heap, P. Baud</i>
203	<b>Assessing the impact of tephra fall on coffee production at Santa Ana volcano, El Salvador</b> <i>A.V. García Lara, J.Y. Rivera Ayala, D.U. Lemus Flores, C.J. Harpel, S. Biass, L. Domínguez, C. Bonadona, D. Bertin, K. J. Godínez</i>
147	<b>The Khonkho tephra and its implications for the rise of Tiwanaku and distal ashfall hazards in the Central Andes</b> <i>C. Harpel, E. Marsh, D. Damby, L. Melendes</i>
129	<b>How syn-eruptive magma limestone interaction can increase the tephra fallout hazard</b> <i>M. Knuever, D. Mele, R. Sulpizio, A. Pisello, F. Vetere, A. Costa, D. Perugini</i>
266	<b>Investigating Degassing and Crystallization Processes in Magmatic Ascent: Insights into Precursory Signals at Campi Flegrei Caldera</b> <i>L. Pappalardo, C. Baccari, G. Buono, M. A. Di Vito, P. Petrosino</i>
375	<b>Eruptive styles and magma fragmentation at Cinder Cone, Lassen, California: insights from juvenile ash</b> <i>G. Pasdeloup, P.-S. Ross, K. Walowski</i>
612	<b>Increased volcanic risk at Stromboli</b> <i>T. Ricci, R. Civico, P. Scarlato, D. Andronico, M. Cantarero, E. De Beni, E. Del Bello, U. Kueppers, M. Schmid, J. Taddeucci</i>
327	<b>High frequency petrological monitoring at open-conduit volcanoes: The case of May 11 2019 explosions at Stromboli volcano (Italy).</b> <i>A. Pontesilli, E. Del Bello, P. Scarlato, S. Mollo, B. Ellis, D. Andronico, J. Taddeucci, M. Nazzari</i>
96	<b>The last explosive eruption of La Primavera caldera, Jalisco, Mexico</b> <i>D. Sourisseau, J. L. Arce, J. L. Macías</i>
525	<b>Constraining eruption parameters and environmental impacts using remote sensing observations of forest disturbance and recovery.</b> <i>M. Udy, S. Ebmeier, S. Watt, A. Hooper, I. Woodhouse</i>
314	<b>Comparison of physical parameters of three lava fountain episodes on Etna volcano within the 2021 paroxysmal sequence</b> <i>D. Andronico, A. Cristaldi, M. de Michieli Vitturi, F. Ferrari, F. Pardini, G. Pasdeloup, P.-S. Ross</i>
301	<b>Advancement on ash leachates study at Stromboli volcano from 2019 to 2023</b> <i>E. Bagnato, D. Andronico, D. Cintì, E. Del Bello, T. Ricci, P. Scarlato, J. Taddeucci</i>
103	<b>Applying a Cost-Benefit Analysis method at a volcanic risk management plan in Latino-América: The case of the municipality of La Florida, Nariño, Colombia</b> <i>G. Córdoba, A. Costa, D. Rodríguez</i>
641	<b>High-resolution geochemical characterization of Irazú's magmatic evolution over the last 2000 years</b> <i>F. E. Dabbs, P. Hidalgo-Odio, G. E. Alvarado, D. Campos-Durán, P. C. Ryan</i>
503	<b>Comprehensive analysis of Strombolian explosion parameters using high-frequency, thermal, UV, visual, and acoustic time series data</b> <i>E. Del Bello, E. Bagnato, L. Spina, G. Tamburello, J. Taddeucci, T. Ricci, P. Scarlato, D. Andronico, F. Pennacchia</i>
698	<b>Reconstrucción de la erupción de abril de 1993 del volcán Lascar mediante modelos numéricos</b> <i>A. Esquivel, F. Aguilera</i>
657	<b>Numerical reconstruction of the Late Pleistocene X-6 eruption from Campi Flegrei (~109 ka)</b> <i>G. Fernandez, A. Costa, B. Giaccio, D. M. Palladino, G. Sottili</i>
368	<b>Refining the marine tephrostratigraphy of the central Mediterranean (40-90 ka): New insights into Late-Pleistocene Campanian explosive volcanism</b> <i>M. Flynn, P. Albert, G. Fernandez, V. Smith, C. Manning, R. Isaia, S. Vineberg, S. Nomade, P. Richard</i>
729	<b>Las cenizas de erupciones de julio de 2013 versus erupciones de mayo de 2023, del volcán Popocatepetl, centro de México</b> <i>F. García Tenorio, I. F. Mendiola López</i>
47	<b>Magma reservoir conditions inferred from young, explosive post-caldera El Cajete sequence at Valles Caldera, New Mexico, USA</b> <i>J. Kim, A. Clarke, K. Roggensack, D. Ruth, D. Blatter</i>
434	<b>Phreatomagmatic fragmentation and tephra deposition at Blue Lake Crater, Oregon, USA</b> <i>S. Leiter, P.-S. Ross, E. Johnson</i>
223	<b>Relationship between lava length and lava volume</b> <i>T. Marusih, T. Kozono, E. Fujita</i>
537	<b>Constraining the eruption history of the Canary Islands and Azores using distal marine cores</b> <i>D. McLean, E. Horn, S. Aguiar, N. Barton, S. Carolin, H. Kuhlmann, J. M.R. Pacheco, A. Pimentel, A. Styring, K. Uno, H. Upton, Y. Xu, V. C. Smith</i>
234	<b>Algoritmo de detección por análisis de conglomerados de amplitud de onda</b> <i>J. L. Méndez</i>
289	<b>Long range infrasound analysis of explosive activity of Yasur volcano (Vanuatu).</b> <i>R.S. Morelli, D. Gheri, P. Campus, D. Coppola, E. Marchetti</i>
751	<b>Evidencias de Erupciones de Gran Magnitud en Isla Clarión, México: Implicaciones para el Riesgo</b> <i>M.J. Rodríguez Delgado, A.P. Ruiz Galindo, N.R. Varley, J. Roberg</i>
630	<b>Vent determination in explosive eruptions using multidisciplinary approach: application at Joya Honda Maar, Mexico.</b> <i>L.A. Rodríguez Sedano, M.F. Cerca Ruiz, D. Sarocchi, J. Almaguer Rodríguez, J.P. Solano Monge, R. Saucedo, R. Guevara Betancourt, B. Chako-Tchamabé</i>

521	<b>Sboffing and ringing: active degassing styles at Etna in 2023</b> <i>C. Biensan, J. Taddeucci, T. Ricci, E. Del Bello, P. Scarlato</i>
376	<b>Dynamics of magma ascent during the 1993 sub-Plinian eruption of Lascar volcano, northern Chile, and implications for hazard assessment</b> <i>Á. Aravena, A. Esquivel-Cáceres, Y. Gómez-Leyton, P. Salazar</i>

Abstract ID	406. Decoupling in Pyroclastic Density Currents: Monitoring, Mapping, Hazards, Impacts, Risks
21	<b>Runout and Hazard Characteristics of Pyroclastic Density Currents Overcoming Topographic Obstacles</b> <i>L. Corna, G. Lube, E. Brosch, J. Jones, D. Uhle</i>
52	<b>Stepping into the Flow: Deciphering the Influence of Topographic Steps on the Dynamics and Hazards of Pyroclastic Density Currents</b> <i>E.C.P. Breard</i>
86	<b>Pyroclastic Density Current hazard map of Misti volcano, Arequipa, Peru</b> <i>K. Cueva Sandoval, S. Charbonnier, J. Mariño, V. Gueugneau, J.-C. Thouret, A. Pari, C. Arias, J. Cuno, A. Ancalle, C. Quispe</i>
225	<b>Understanding and simulating genesis of dilute PDCs and their decoupling</b> <i>K. Kelfoun, V. Gueugneau</i>
315	<b>A first preliminary attempt to experimentally calculate the coefficient of restitution of highly irregular volcanic particles</b> <i>F. Neglia, Dioguardi, Mele, Caruso, Sulpizio, Sarocchi</i>
403	<b>Numerical modeling of the June 3rd, 2018, pyroclastic density currents at Fuego volcano (Guatemala): implications for flow decoupling hazards</b> <i>S. J. Charbonnier, V. Gueugneau</i>
763	<b>Granulometric and component analysis of deposits associated with the ~760-year eruption of Tacaná Volcano, Mexico</b> <i>J. F. Mendiola López, J. L. Macías Vázquez, J. S. Fernández Peña, F. García Tenorio</i>

Abstract ID	409. Multi-scale and multi-parametric geodetic monitoring and modeling for studying and forecasting volcanic activity
42	<b>New insights on the 2011-2021 unrest at Long Valley Caldera (USA) from InSAR and GNSS data</b> <i>E. De Paolo, E. Trasatti, C. Tolomei, E.K. Montgomery-Brown</i>
80	<b>Complex magma propagation paths during the 2017, 2018 and 2020 eruptions at Fernandina (Galápagos) inferred from InSAR data and geodetic modelling.</b> <i>F. Galetto, D. Reale, E. Sansosti, V. Acocella</i>
106	<b>Volcanic and Seismic source Modelling (VSM) - An open tool for geodetic data modelling</b> <i>E. Trasatti</i>
136	<b>Evolution of the shallow reservoir at Campi Flegrei caldera (Italy) during the 2007-2020 unrest</b> <i>A. Astori, E. Trasatti, V. Acocella, M. Polcari, M. A. Di Vito</i>
142	<b>Analysis of the recent Copahue Volcano unrest (2015-2023) from geodetic data</b> <i>A. Astori, F. Carballo, L. Pardo Duró, E.M. Wright, C. Mardones Castro, A. Alarcón, G. Acosta</i>
177	<b>Modelling Surface Deformation due to Magma Migration through Mush Zones</b> <i>R. Bilisland, A. Hooper, C. Novoa, S. Ebmeier, J. Hickey</i>
291	<b>Finite element modelling of the source of ground deformation in Tenerife (Canary Islands) during the 2004-2005 unrest</b> <i>M. Przeor, L. D'Auria, R. Castaldo, S. Pepe, P. Tizzani, A. Barone, A. Vitale, V. Ortega</i>
313	<b>Towards a systematic catalogue of volcano deformation source parameters from Sentinel-1 InSAR data</b> <i>B. Ireland, J. Biggs, N. Anantrasirichai</i>
353	<b>Fifteen years (2008-2023) of geodetic observations at Shishaldin Volcano, Alaska, USA</b> <i>M. Angarita, R. Grapenthin, M. Christoffersen</i>
371	<b>Joint exploitation of geodetic and seismic data to detect hydrothermal unrest in active calderas: A case study of the 2021-23 Vulcano Island (Italy) crisis</b> <i>F. Monterroso, V. Bruno, F. Casu, O. Cocina, C. De Luca, F. Di Traglia, F. Giudicepietro, R. Lanari, G. Macedonio, M. Mattia, E. Privitera</i>
395	<b>Estudio preliminar de los desplazamientos superficiales del Popocatepetl por medio de InSAR</b> <i>C. A. García-Sandoval, J. A. González-Ortega, D. M. Vargas-Bracamontes</i>
433	<b>The 2021 Resurgence in Deformation at the Three Sisters Volcanic Field, Oregon Cascades</b> <i>J. Gates, D. Schmidt, S. Henderson</i>
511	<b>Eruption Dynamics during the 2016-2022 Nevados de Chillán, Chile Eruption Constrained by Surface Deformation and Effusive Flux Datasets</b> <i>E. Eiden, M. Pritchard, P. Lundgren, K. Anderson, Y. Moussallam, T. Barnie, L. Córdova, C. Cardona</i>
618	<b>Deformación del flanco occidental del Volcán Arenal, Costa Rica, detectada por InSAR entre, 2017-2023</b> <i>G. López Vizcaino, C. Müller</i>
636	<b>The early detection of paroxysmal eruptions at Stromboli volcano through the use of pattern recognition: a tool to mitigate volcanic risk</b> <i>F. Cannavò, E. Privitera, W. De Cesare, B. Di Lieto, A. Esposito, F. Giudicepietro, V. Minio, M. Orazi, P. Romano</i>
652	<b>Monitoring the deformation at Nevados de Chillan Volcano Complex, during the last eruptive cycle, using GNSS e InSAR.</b> <i>L. Córdova, C. Mardones, G. Pedreros</i>
679	<b>What does ground deformation and brittle fracture earthquake swarms at long-dormant Chiles-Potrerrillos volcanoes, Ecuadorian-Colombia border, reveal about potential crustal failure?</b> <i>P. A. Mothes, M.A. Yépez, A. Córdova, D. Pacheco, J. Battaglia, M. Battaglia, L. Narváez Medina, D. Arcos, P. A. Espín Bedón</i>
725	<b>Estudio de procesos de inflación en los volcanes del Sur del Perú: casos de Deformación continua, Pre-eruptiva y sin Erupción</b> <i>L. Cruz, R. Miranda, E. Taipe, K. Gonzales, D. Pamo</i>

Abstract ID	411. Tourism in suddenly erupting volcanoes: the hazards and risk of phreatic eruptions
282	<b>Experimental Study of Impact Absorption Effect of Overlying Artificial Pumice Layer for Dealing with Ballistic Rock Impact</b> <i>M. Yoshimoto, T. Kubo, R. Honda, T. Nishizawa, K. Tateyama, H. Yamad</i>
439	<b>Diffuse emission of dioxide carbon from El Hoyo Volcano: a preliminary assessment</b> <i>E. Martínez, N. Solano, M. Hernández, M. Castro, M. González, R. Campos, D. Hernández, W. D'Alessandro, L. Li Vigni, S. Calabrese</i>
449	<b>Geochemical survey of volcanic gasses at touristic areas at El Salvador volcanoes</b> <i>N.S. Solano Melara, E.G. Martínez Hernández, M.Á. Hernández Martínez, M.A. Castro Mendoza, M.A. González Aguilera, R.D. Campos Cortéz, D.M. Hernández Martínez, W. D'Alessandro, A. Sandoval-Velazquez, L. Li Vigni, S. Calabrese</i>
684	<b>Comprender la actividad explosiva del volcán Copahue: un paso necesario para la gestión del turismo volcánico</b> <i>F. Carbajal, N. Vigide, S. García, G. Badi, P. Forte</i>
530	<b>Reevaluation of volcanic risk related to phreatic eruptions examples from Costa Rica</b> <i>G. González, D. Rouwet, A. Nieto, R. Sulpizio, A. Costa, F. Lucchi, A. García</i>

Abstract ID	412. Volcano slope instability and its products: from debris remobilization to cascading hazard
316	<b>Volcanic Island Sector Collapse: Implications for subsequent mass movements from marine records drilled with MeBo70 offshore Montserrat (Lesser Antilles)</b> <i>K. Sass, S. Kutterolf, T. Freudenthal, S. Watt, C. Berndt, S. Krastel, K. Huhn</i>
585	<b>Soil-slip susceptibility assessment on Popocatepetl volcano</b> <i>E. Pico Rodríguez, L. Capra Pedol, V. Coviello, G. Norini, D. Ferrés, N. Dávila, V. H. Márquez-Ramírez</i>
597	<b>Reología de lahares sineruptivos en el volcán Popocatepetl (México)</b> <i>R. Bernabé Ricardo, L. Caballero, C. Tranquilino, M. Flores Guzmán, D. Sarocchi</i>
384	<b>Coastline changes triggered by lahar events following the Ambae 2017-2018 eruption</b> <i>C. Harue, P. Bani, D. Tari, F. Nauret, E. Rose-Koga</i>
488	<b>The Granular Effect: Exploring Factors Influencing Volcanic Landslide Runout Through Analogue Experiments</b> <i>S. Makris, I. Manzella, A. Sgarabotto</i>
466	<b>The LAIMA-UASLP GRANFLO: a laboratory for large scale granular flow experiments</b> <i>D. Sarocchi, J. A. Montenegro-Ríos, L.A. Rodríguez Sedano, O. Segura Cisneros, L. Caballero, F. Dioguardi, N. Nedumpallile-Vasu, L. Capra, G.M. Rodríguez-Liñan, V.H. Márquez Ramirez, L. Borselli</i>
595	<b>An inventory of Volcanic Debris Avalanches of the Puna region (Central Andes)</b> <i>E. Bustos, W. Báez, G. Norini, M. Amosio, P. Grosse, L. Capra</i>
288	<b>Inundation and evacuation of shoreline populations during landslide-triggered tsunami: An integrated numerical and statistical hazard assessment</b> <i>E. M. Bonilauri, C. Aaron, M. Cerminara, R. Paris1, T. Esposti Ongaro, B. Calusi, D. Mangione, A.J.L. Harris</i>

Abstract ID	415. Risk mitigation in dormant volcanic provinces
158	<b>Volcanic response planning in areas of distributed volcanism: An Auckland case study</b> <i>A.L. Doherty, A. Milner, G. Leonard, J.M. Lindsay</i>
258	<b>Quaternary explosive eruption of Mt. Baekdu assessed by widespread volcanic tephra</b> <i>S.-H. Yun, C. Chang, E. Jeong Yang</i>
275	<b>Lava flow hazard assessment on Bioko Island (Equatorial Guinea)</b> <i>J. Brauner, M.O. Chevrel, L. Vanderkluyzen, T.R. Walter</i>
401	<b>Una propuesta para el monitoreo de la región Parícutín -Tancitaro en el campo volcánico Michoacán-Guanajuato</b> <i>M.C. Zarazúa-Carbajal, A.T. Mendoza-Rosas, G.V. Caballero-Jiménez, Á. Gómez-Vázquez, S. De la Cruz-Reyna</i>

Abstract ID	420. Lessons from recent eruptions and other crises
176	<b>Cascading impacts due to road network disruption in an insular setting: the 2021-Tajogaite eruption (La Palma, Spain)</b> <i>L. Domínguez, S. Biass, C. Frischknecht, M.-P. Reyes Hardy, L. Di Maio, C. Bonadonna, N. Pérez</i>
164	<b>Assessing volcanic ashfall impacts on diverse agroecosystems: Lessons from recent eruptions in tropical regions</b> <i>H. Craig, T. Wilson, C. Stewart, J. H. Williams, F. Auapaau</i>
699	<b>Observatory mismanagement and its impact on health and safety: A personal perspective</b> <i>G. Thompson</i>

Abstract ID	425. Emergency strategies at the frontiers of understanding: embracing new worlds from artificial intelligence to social media
213	<b>We volcanologists are becoming more useful! :-)</b> <i>C. Newhall</i>
309	<b>Mobile-based warning systems to enhance volcanic warnings fast and far</b> <i>C.J. Fearnley</i>
388	<b>Transferring experience on responding to unrest in long repose period volcanoes. La transmisión de experiencia en la gestión de emergencias en volcanes con periodos de reposo largos.</b> <i>M. del C. Solana</i>
409	<b>Mitigating the highest volcanic risk in the World: a multidisciplinary strategy for the Neapolitan area</b> <i>G. De Natale, C. Troise, P.M. Buscema, R. Somma, G. Maurelli, A. Trocciola, A.o Coviello, A. Giannola, S.M. Petrazzuoli</i>



572	<b>The DIGIVOLCAN infrastructure: a tool for automated real-time prediction of eruptions in the Canary Islands</b> <i>V. Mayorca Luis, L. D'Auria, J. Barrancos Martínez, J. Camacho Páez, M. del C. Benítez Ortúzar, L. García Martínez, J. Ibáñez Godoy, S. Mota Fernández, V. Ortega Ramos, G. D. Padilla Hernández, N.M. Pérez, J. Preciado-Garbayo, J. Prudencio Soñora, J.L. Sánchez de la Rosa</i>
576	<b>Characterising the sources of volcanic tremor during the 2021 Tajogaite eruption (La Palma, Canary Islands) through Distributed Acoustic Sensing</b> <i>L. D'Auria, J. Barrancos, I. Cabrera Pérez, A. Falcón García, G.D. Padilla, J. Preciado-Garbayo, M. Przeor, V. Ortega, D. Martínez van Dorth, N.M. Pérez</i>

Last update: 05/02/24

Cities on Volcanoes 12 Program



Themes	1. Volcanoes and sustainable development	2. Volcanoes, the humanities and creative Arts	3. Volcanoes and their social, cultural, and political context	4. From volcano monitoring and hazard assessment to risk management
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Tuesday, February 13

<b>8:00-10:00</b>	<p><b>Centro Cultural César Brañas Inaguration and Opening Ceremony (Open to public)</b>  <b>Plenary Session 2: Risk and disaster scholarship in Latin America</b>                  Irasema Alcántara-Ayala, Alex Guerra, Wotzbely Suarez</p>
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Room Landivar

<b>10:30 - 13:00</b>	<b>403. Multidisciplinary investigations to unravel the structure and dynamics of active volcanic systems</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12+ 3 min)</i>
341	<b>Fantastic fissure eruptions and where to find them: Insights from an experimental study</b> <i>J. Ruz-Ginouves, J.D.L White, R. J.M Baxter, G. Leonard</i>
354	<b>Magma storage and transport along volcanic rift zones constrained by geodetic data and dynamical models</b> <i>A. Roman, P. Lundgren</i>
357	<b>The noble gas and carbon isotopic signature of the 2021 Tajogaite eruption (La Palma, Canary Islands)</b> <i>A. Sandoval-Velasquez, F. Casetta, T. Ntafos, A. Aiuppa, M. Coltorti, M.L. Frezzotti, V. Zanon, M. Alonso, E. Padrón, M. Pankhurst, N.M. Pérez, A.L. Rizzo</i>
568	<b>The deep structure of the Campi Flegrei caldera by magnetotelluric survey</b> <i>M.G. Di Giuseppe, R. Isaia, A. Troiano, C. De Paola, F. Pagliara</i>
310	<b>Unveiling the secrets beneath Campi Flegrei: probing the depths with receiver function analysis</b> <i>V. Ortega-Ramos, L. D'Auria, J. L. Granja-Bruña, I. Cabrera-Pérez, J. Barrancos, G. Padilla, P. Hernández, N. Pérez</i>
744	<b>Spectral content analysis of Nevado del Ruiz Volcano seismicity from 2012 eruptions: Understanding volcanic processes and conduit properties variations.</b> <i>Y.P. Rave Bonilla, M. Rodgers, F. Rodríguez-Cardozo, J. Braunmiller</i>
112	<b>Analysis of Magnetic Field Variations Compared to Seismic and Infrasonic Activity at Chiles Volcano Using Sensor Arrays</b> <i>M. Ruiz, W. Enriquez, K. Loaiza</i>
286	<b>Hydrothermal outgassing dynamics revealed by coupled seismo-acoustic observations (Pisciarelli, Campi Flegrei Caldera, Italy)</b> <i>R.S. Morelli, D. Delle Donne, M. Orazi, L. Nardone, F. Liguoro, F. Giudicepietro, R. Peluso, G. Scarpato, A. Tramelli, L. Pappalardo, V. Morra, S. Caliro</i>
428	<b>A next generation chronology of Late Pleistocene to Holocene volcanism in the southern Andes</b> <i>P. Moreno-Yaeger, B. S. Singer, B.R. Jicha, M. Kurz, F. Vera</i>
65	<b>Understanding multi-volcanism in the large composite volcano of Kirishima, Japan</b> <i>Y. Tajima, T. Kobayashi</i>

**13:00 - 14:00 Lunch**

**14:00 - 14:30 Poster Session (Plaza San José) & Coffee**

<b>14:30 - 15:00</b>	<b>403. Multidisciplinary investigations to unravel the structure and dynamics of active volcanic systems</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12+ 3 min)</i>
538	<b>Evolution of plumbing system and eruptive style at Stromboli (Aeolian Islands -Italy) during the last 4 millennia</b> <i>M. Pompilio, G. Re, P. Del Carlo, A. Di Roberto</i>
44	<b>A direct look on a monogenetic cone internal structure: the case of Granillo Rojo (Santa Cruz – Galapagos).</b> <i>M. Mulas, J. Tipán, M. Villalta, V. Vaca, V. Rosado, M. Menoscal, G. Bravo, E. Larreta, D. Garces, S. Bantugan</i>

<b>15:00 - 16:00</b>	<b>401. Temporal and Spatial Evolution of the Internal Structure of Active Volcanic Systems</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12+ 3 min); *Invited talk</i>
81	<b>*Multiscale seismic tomography studies of volcanoes of Kamchatka</b> <i>I. Koulakov</i>
267	<b>Constraining links between seismicity and eruptive processes at Mt. Etna during the December 2018 flank eruption</b> <i>J.H. Webb Eyles, W.B Frank, P. Poli</i>
350	<b>Revealing Volcanic Insights: Harnessing Data, Algorithms, and Collaboration for Safer Communities</b> <i>B. Taisne, A. Bayu Aji, Y. Luo, C. Widiwijayanti, T. Espinosa Ortega, N.T. Zar Win</i>

620	<b>Needle in the Haystack – How Pattern Recognition Techniques Applied to Continuous Volcanic Tremor Can Help Us Unravel Volcano-Internal Processes</b> <i>B. Steinke, A. Kempa-Liehr, A. Jolly, S. Cronin, D. Dempsey, R. Carniel</i>
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16:00 - 16:30

Coffee Break and Posters

16:30 - 17:30

## 401. Temporal and Spatial Evolution of the Internal Structure of Active Volcanic Systems

Abstract ID	<i>Format: Oral presentations (12+ 3 min); *Invited talk</i>
628	<b>Análisis de actividad superficial sin precursores evidentes: El caso de la erupción (2016-2022) del Complejo volcánico Nevados de Chillán, Chile</b> <i>G. Pedreros Delgado, M.A. Contreras Vargas, J.J. San Martín, L. Córdova Varas, C. Bucarey, M. Figueroa Vera</i>
9	<b>Limitaciones para calcular las condiciones pre-eruptivas en magmas mezclados y asimilados: Perspectivas del volcán La Malinche, México</b> <i>J.A. Gómez-Arango, G. Sosa-Ceballos, M.E. Boijseauneau-López</i>
75	<b>Estimating recharge volumes and timescales from plagioclase zoning patterns</b> <i>B.J. Andrews</i>
340	<b>*Tectonic control of magma emplacement and spatio-temporal magma evolution in the Michoacán-Guanajuato Volcanic Field, Mexico.</b> <i>M.G. Gómez-Vasconcelos, D. Ramón Avellán, J.L. Macías</i>

17:30 - 18:30

Poster Session (Plaza San José)

## Room San José

10:30 - 13:00

## 103. Volcano geology and mapping for hazard assessment, risk and resource-management, and building cultural value of the territory

Abstract ID	<i>Format: Oral presentations (12+ 3 min)</i>
342	<b>Geological map of the Galeras Volcanic Complex, 1:25 000 scale: new perspectives on the stratigraphy and eruptive history</b> <i>M. Tamayo, S. Castilla, L. Rayo, B. Pulgarín, D. Palechor, A. M. Correa Tamayo, Y. Cruz Toro, I. Zuluaga, S. Villamil, L. Acosta, S. Villota, J. Gómez, P. Narváez</i>
232	<b>Tephra stratigraphic approach to eruptive history in Berlín-Chinameca volcanic area, Eastern El Salvador</b> <i>S. Kitamura</i>
522	<b>The Neapolitan Yellow Tuff eruption (Campi Flegrei, Italy) studied from the conduit dynamics to the deposit</b> <i>G. González, R. Sulpizio, A. Costa, R. Isaia, F. Lucchi, B. Giaccio, J. Natale, L. Monaco, S. Nomade, A. Pereira, G. Siani, D. Mele</i>
391	<b>Discovering the hidden features of two unexplored crater-lake maars (axalapazcos) in the Serdán-Oriental basin volcanic field, México</b> <i>J.A. Cavazos-Alvarez, G. Carrasco-Núñez, S. Macías-Medrano, J. Mancera-Alejandez</i>
603	<b>Reassessment of the eruptive history of the Atitlán volcano: towards hazard evaluation</b> <i>E. Pico Rodríguez, L. Capra Pedol, R. Torres Orozco, D.E. Secaira Ziegler, G.A. Chigna Marroquín, M. Moncada Vásquez</i>
611	<b>3D-mapping and facies analysis of Cotopaxi volcano's 1877 primary lahar proximal deposits</b> <i>S.D. Andrade, J. Chilibingua, J. López, K. Yanchaliquin</i>
116	<b>Quaternary volcanic geology, eruptive history, and hazard implications of a natural laboratory at the easternmost sector of the Trans-Mexican Volcanic BeltGerardo Carrasco-Núñez; Jaime Alberto Cavazos-Álvarez</b> <i>G. Carrasco-Núñez, J.A. Cavazos-Álvarez</i>
261	<b>Eruptive history of Usu volcano, Hokkaido, Japan, as revealed by trench surveys of the Higashi-Maruyama cryptodome</b> <i>Y. Goto, A. Tomiya</i>
32	<b>Vesuvius 79 AD eruption: the human casts of Pompeii, their stratigraphic significance and hazard implication</b> <i>L. Giacomelli, R. Scandone</i>

13:00 - 14:00

Lunch

14:00 - 14:30

Poster Session (Plaza San José) &amp; Coffee

14:30 - 16:00

## 104. Ciencia justa, comunidades equitables e inclusivas: sesión conmemorativa a Martha Navarro Collado

	<i>Format: Open debate</i>
	Panelists: Eveling Espinoza Jaime, Carmen Gutierrez Gutierrez, Nérida Manrique Llerena, Mariana Patricia Jácome Paz

16:00 - 16:30

Coffee Break and Posters

**17:30 - 18:30** **Poster Session (Plaza San José)**

**18:45 - 20:00** **ECR Mentoring session**

**Room Obispo**

**10:30 - 12:00** **410. Shallow submarine and marine-emergent volcanism: Marine tephra, physical processes, risks, response, and monitoring**

Abstract ID	Format: Oral presentations (10 min); *Invited talk
779	<b>*Erupciones volcánicas recientes en Canarias: asesoramiento científico del Instituto Español de Oceanografía (IEO-CSIC) durante las crisis volcánicas de El Hierro (2011) y La Palma (2021)</b> <i>E. Fraile-Nuez, J.T. Vázquez-Garrido, M. Gómez-Ballesteros, J.M. Arrieta, J.A. Lozano-Rodríguez, O. Sánchez-Guillamón, D. Palomino, M. García, C. Presas-Navarro, I. Diaz-Durán, J. Escáñez-Pérez, M. González-Porto, P. Lozano, J.P. Martín-Díaz, A. González-Vega</i>
46	<b>Inyección atmosférica de sales marinas durante la erupción submarina del 15 de enero de 2022 en el volcán Hunga, Tonga</b> <i>M. Colombier, I.A. Uksins, S. Tegtmeier, B. Scheu, S.J. Cronin, S. Thivet, J. Paredes-Mariño, C. Cimarelli, K.-U. Hess, T. Kula, F.H. Latu'ila, D.B. Dingwell</i>
379	<b>Analysis of 2021 Fukutoku-Oka-no-Ba hydroacoustic, lightning, plume width, and infrasound data</b> <i>K. McKee, K. Fauria, M. Ichihara, J. Assink, F. Maeno, J. Caplan-Auerbach, M. Louis, D. Metz, A. Gupta, C. Vagasky</i>
416	<b>Managing the hazard risks posed by Kolumbo submarine volcano (Santorini, Greece)</b> <i>A. Katsigera, P. Nomikou, SANTORY TEAM</i>
238	<b>*Scientific drilling reveals hazardous explosive eruptions of the Kameni Volcano inside the Santorini Caldera</b> <i>J. Preine, J. Karstens, C. Hübscher, T.H. Druitt, S. Kutterolf, P. Nomikou, M. Manga, R. Gertisser, K. Pank, S. Beethe, C. Berthod, G. Crutchley, I. McIntosh, T. A. Ronge, M. Tominaga, A. Clark, S. DeBari, R. Johnston, Z. Mateo, A. Peccia, C.K. Jones, G. Kletetschka, A. Metcalfe, A. Bernard, H. Chen, S. Chiyonobu, T. Fernandez-Perez, K. Batuk Joshi, O. Koukousioura, M. McCanta, A. Morris, P. Polymenakou, A. Woodhouse, Y. Yamamoto, K.-L. Wang, H.-Y. Lee, X. Li, D. Papanikolaou</i>
287	<b>Explosive volcanism at Santorini - new insights into the timing and frequency using marine tephra from IODP Expedition 398</b> <i>K. Pank, A. Metcalfe, T. Druitt, S. Kutterolf, S. Chiyonobu, O. Koukousioura, A. Woodhouse, T. Ronge, S. Beethe, A. Bernard, C. Berthod, H. Chen, A. Clark, S. DeBari, R. Gertisser, C. Hübscher, R. Johnston, C. Jones, K. Batuk Joshi, G. Kletetschka, X. Li, M. Manga, M. McCanta, I. McIntosh, A. Morris, P. Nomikou, A. Peccia, T. Fernandez Perez, P. Polymenakou, J. Preine, M. Tominaga, A. Woodhouse, Y. Yamamoto</i>
332	<b>Estimating Magmatic Water Contents in Hellenic Arc Magmas via Pyroxene Hygrometry</b> <i>A. Peccia, T. Plank, T. Druitt, S. Kutterolf, T. Ronge, S. Beethe, A. Bernard, C. Berthod, H. Chen, S. Chiyonobu, A. Clark, S. DeBari, T.I. Fernandez Perez, R. Gertisser, C. Hübscher, R.M. Johnston, C. Jones, K. Batuk Joshi, G. Kletetschka, O. Koukousioura, X. Li, M. Manga, M. McCanta, I. McIntosh, A. Morris, P. Nomikou, K. Pank, P. N. Polymenakou, J. Preine, M. Tominaga, A. Woodhouse, Y. Yamamoto</i>
614	<b>Volcanogenic turbidites in marine sediment successions off Stromboli island</b> <i>R. De Rosa, C. Morrone, A. Bertagnini, A. Di Capua, A. Di Roberto, P. Donato, A. Freundt, S. Kutterolf, M. Pistolesi, M. Rosi</i>
471	<b>Investigating the marine tephrostratigraphy of the Azores Archipelago to test possible volcanism-climate interactions in a non-glaciated ocean island setting</b> <i>M. Andrade, J.C. Belo, S. Kutterolf, T.H. Hansteen, C. Schmidt, A. Pimentel, H.-Y. Lee, K.-L. Wang</i>

**12:00 - 13:00** **407. Evaluating secondary volcanic hazards: methodologies, recent advances and still open questions**

Abstract ID	Format: Oral presentations (12 min)
731	<b>Evolución de la barranca Ceniza y el impacto de su actividad lahárica en Colonia Las Palmas, Volcán de Fuego, Guatemala</b> <i>R. Mérida Boogher, G.A. Chigna Marroquín, E.A. Barrios Escobar, A. Calderas Cárdenas, M.S. Pérez Coj, J.C. Mock</i>
14	<b>Hazard and vulnerability assessment to lahars in an inactive volcano: Pico de Tancitaro, Michoacán (Mexico)</b> <i>R. Vázquez Morales, A. Flores Aparicio, F. García Tenorio, T. Carlón Allende, F. Mendiola López</i>
348	<b>Lahar Acoustic Remote Detection (LARD) para el monitoreo de lahares acercando; Volcán de Fuego (Guatemala) y Volcán Sangay (Ecuador)</b> <i>J.B. Johnson, A. Roca, A. Pineda, M. Ruiz</i>
427	<b>A machine learning-based strategy to detect and catalog rain-triggered lahars through geophysical monitoring at Volcan de Fuego, Guatemala.</b> <i>G. Bejar, G. P. Waite, R. Escobar-Wolf, A. Bosa, J. Johnson, A. Pineda, A. Roca, R. Merida, J. Mock</i>
201	<b>Towards an Operational Lahar Early Warning System at Santiaguito Volcano, Guatemala</b> <i>F. Massin, J. Clinton, D. Jozinovic, A. Roca</i>

**13:00 - 14:00** **Lunch**

**14:00 - 14:30** **Poster Session (Plaza San José) & Coffee**

**14:30 - 16:00** **417. Forecasting volcanic hazards: new technologies and probabilistic multi-source and multi-hazard assessment combining HPC and field data**

Abstract ID	Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (5 min); *Invited talk
172	<b>*Assessing volcanic hazards in the HPC era</b> <i>A. Costa</i>
100	<b>New trends on the use of HPC and cloud computing infrastructures for volcanic hazard assessments at multiple scales</b>

100	<i>A. Folch</i>
130	⚡ <b>Forecasting the evolution of volcanic unrest</b> <i>S. Ferrara, W. Marzocchi, J. Selva, L. Sandri</i>
326	<b>Towards Developing a Probabilistic Eruption Forecasting Model for Redoubt Volcano, Alaska</b> <i>V. Burgos, T. Lopez, W. Marzocchi, M. Angarita, D. Fee, T. Girona, R. Grapenthin, P. Izbekov, J. Larsen, J. Moshrefzadeh, P. Saunders-Shultz, T. Shreve, D. Tan</i>
688	<b>Towards improved forecasting of volcanic hazards using Artificial Intelligence applied to multispectral satellite imagery</b> <i>C. Corradino, S. Cariello, F. Torrisi, C. Del Negro</i>
389	<b>Satellite Data Synergy for Volcanic Monitoring: The Mauna Loa 2022 eruption</b> <i>I.T.W. Flynn, S. Bhushan, J.O. Thompson, M.S. Ramsey</i>
404	⚡ <b>Bayesian Inference applied to hazard assessment for Pyroclastic Density Currents and Lahars in Planchón-Peteroa Chilean volcano</b> <i>I. Martínez Valdés, P. Salazar Reinoso, F. Aguilera Barraza, Y. Gómez Leyton, A. Aravena Ponce, A. Nieto Torres</i>

16:00 - 16:30

Coffee Break and Posters

<b>16:30 - 17:30</b>	<b>417. Forecasting volcanic hazards: new technologies and probabilistic multi-source and multi-hazard assessment combining HPC and field data</b>
Abstract ID	<i>Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (5 min)</i>
405	<b>Challenges in block-and-ash flow hazard assessment: the July 10-11, 2015 eruption of Volcán de Colima, Mexico</b> <i>L. Capra, G.M. Rodríguez-Liñán, R. Torres-Orozco, V.H. Márquez-Ramírez, R. Sulpizio, R. Arámbula</i>
733	<b>Modeling Eruptive Activity at Fuego on Multiple Time Scales</b> <i>E. Spiller, R. Wolpert, R. Escobar-Wolf, P. Tierz, A. Roca, A. Bain; E. Calder, D. Vasquez Monterroso</i>
660	<b>Sistematización de la clasificación de señales sismo-volcánicas del volcán Ubinas basado en modelos ocultos de Markov</b> <i>J. Chalco, G. Cortés, M. Ortega, O. Macedo, F. Apaza, R. Ancasí, P. Masías</i>
534	⚡ <b>Democratizing and Advancing Eruption Modeling Through a Cloud-based Open Software Cyber-Infrastructure</b> <i>E. Lev, S. Krasnoff, S. Charbonnier, C. Connor, A. Patra</i>

17:30 - 18:30

Poster Session (Plaza San José)

## Room Mesón del Obispo

<b>10:30 - 12:30</b>	<b>418. Health hazards associated with volcanic emissions: quantifying emissions, assessing exposure, and informing mitigation</b>
Abstract ID	<i>Format: Oral presentations (12 + 3 min); *ECR presentations (10 min)</i>
162	<b>Respiratory health impacts of volcanic and other natural hazard events in Aotearoa New Zealand</b> <i>C. Maqill, S. Hales</i>
355	* <b>Lateral variation in the aerosol composition of degassing lava flows, with implications for particulate matter and trace metal exposure</b> <i>L. Wainman, E. Ilyinskaya, S. Warren Scott, C. Mandon, B. Kleine, M. Pfeffer, P. Weiser, E. Bali, A. Stefánsson, E. Nicholson, A. Cotterill</i>
252	* <b>Cytotoxicity of nonsilicate volcanic aerosol</b> <i>M. Saidikova, C. Oppenheimer, C. Giorio, A. Schmidt, G. Salerno, G. Giudice</i>
245	<b>Natural radioactivity and volcanic areas: the Lazio region (Italy) case study among air quality, risk assessment and health hazard</b> <i>A. Sciarra, F. Giustini, L. Pizzino, G. Galli, L. Ruggiero, S. Graziani, S.E. Beaubien, G. Ciotoli, S. Bigi</i>
607	<b>CO2 hazard monitoring in the inhabited areas of Puerto Naos and La Bombilla (La Palma, Canary Islands)</b> <i>G.V. Melián, P. Hernández, A.J. Álvarez Díaz, M. Asensio-Ramos, G.D. Padilla, F. Rodríguez, A.M. González Pérez, J. Barrancos, N.M. Pérez</i>
33	<b>Observations of volcanic plume chemistry and exposure in Hawaii using a distributed low-cost sensor network</b> <i>B. Crawford, D. Hagan, A. Dodge, J. Kroll</i>
352	* <b>Assessing the air quality hazards of chronic exposures to volcanic gases and particulate matter on Montserrat, Eastern Caribbean</b> <i>R. Lewis, E. Ilyinskaya, C.J. Horwell, C.F. Braban, J. Neuberger, J. McQuaid</i>
87	<b>Numerical modelling of the volcanic plume dispersion from the hydrothermal system of La Soufrière de Guadeloupe - Implication for the health of the population</b> <i>S. Moune, Y.P. Rave-Bonilla, D. Jessop, C. Garbin, R. Moretti</i>
104	<b>'All four engines have failed!': The psychological and behavioural impacts to passengers and crew on flight BA009 which flew through the 1982 Gallungung ash cloud</b> <i>C.J. Horwell, I. de Terte, R. Meach, B. Daley</i>

12:30 - 13:00

433. Technological innovation for scientific outreach and teaching among communities exposed to volcanic eruptions

Abstract ID	<i>Format: Oral presentations (7 + 3 min)</i>
429	<b>Plataforma digital de divulgación en 3D centrada en los peligros volcánicos (Volcán de Fuego, Guatemala)</b> <i>M. Gómez Navarro, J.B. Johnson, J. Mock, A. Pineda, D. Rizzo</i>
723	<b>Esfuerzos para la comunicación efectiva del vulcanismo, CIVUR39°: Centro interactivo vulcanológico de la Araucanía.</b> <i>M. Sorhaburu, N. Mendoza, A. Palma, P. Obreque, R. Garrido, F. Bucchi, J. Pereira, J. Muñoz</i>
473	<b>Enhancing community engagement through Interdisciplinary Immersive Visualizations</b> <i>I. Manzella, A. Sgarabotto, A. Prior, J. Hodges, M. Garghouti, I. Stewart</i>

13:00 - 14:00	Lunch
14:00 - 14:30	Poster Session (Plaza San José) & Coffee

14:30 - 16:00	313. From Communities to Calderas: historical reconstructions of volcanic eruptions and risk
Abstract ID	Format: Oral presentations (12 + 3 min); *Invited talk; Group discussion
565	*Is the volcano more dangerous than the social?: Aguacatepeque and its long history next to the Fuego volcano, Guatemala <i>D. Vásquez Monterroso</i>
365	*Volcanic eruptions in 19th Century Ecuador: religious, artistic and scientific understandings <i>E. Sevilla, M.A. Vásquez</i>
257	The Devil in the Details: The Role of Volcanoes in Debates about Risk Reduction, Climate Change, and Neocolonialist Science <i>K. Holmberg</i>
587	The first volcano-seismological observatory on Montserrat: 1936-1946 <i>D. Pyle, J. Barclay, M. Mahony, K. Pascal, T. Williams, J. Scarlett, B. Davies, E. Joseph</i>
528	Dendrochronological evidence for the impacts of the 1902 Santa Maria volcanic eruption on the forests of western Guatemala <i>K.J. Anchukaitis, Z.K. Sethuraju, J. Edwards, T. Anderson, D. Pons, A.I. Gonzalez Mendez, M. Taylor</i>
	Group discussion (15 min)

16:00 - 16:30	Coffee Break and Posters
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16:30 - 18:00	Scenes from film - The Colour of Ash and discussion with director M. Prince
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17:30 - 18:30	Poster Session (Plaza San José)
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Room Iglesia San José

10:30 - 13:00	304. Towards ethnovolcanology in Latin America: Plural perceptions of volcanism, place attachment and disaster risk in ancestral volcanic lands
Abstract ID	Format: Oral presentations (12 + 3 min); Group discussion
64	Usos modernos de la imagen volcánica comparados con las iconografías en arte rupestre, y su relación con los mitos en Nariño, Colombia <i>J.J. Sánchez, W.A. Posada</i>
185	Stratigraphy of volcanic memory: Layers of tephra, coping experiences and affects around volcanoes <i>F. Vergara-Pinto</i>
399	Eje Neovolcánico. Aproximaciones artísticas al paisaje igneo. <i>P. Ascencio Fuentes, D. Garza Usabiaga</i>
495	Making Sense of Place: Exploring attachment to place in the context of the Volcán de Tajogaite eruption, La Palma <i>R. Rice, C. Oppenheimer</i>
663	Los guardianes "modernos" de la memoria del volcán Tungurahua <i>L.P. Troncoso Salgado</i>
687	Entre Riesgos y K'aslimaal: Comunidades Originarias y la Gestión de Riesgos ante Eventos Naturales en Territorios Volcánicos <i>A.B. Petzey Quijeú, Abuelos y abuelas Tz'utujiles de Pnab'aj, D.A. Reanda Sapalú, C. Sala Valdés, M.T. Armijos Burneo, E. Calder, J. Phillips</i>
772	Pensamiento telúrico, adaptación y resiliencia en el poblamiento antiguo de los Andes colombianos. Una aproximación multidimensional al análisis de la relación humanos-volcanes <i>W. Posada Restrepo, J.J. Sánchez</i>
490	Mam and K'iche' Mayan Ceremonial Rites with Active Volcanic Landscapes <i>C. Reed, A. Donovan, A. Hicks</i>
	Group discussion (30 min)

13:00 - 14:00	Lunch
14:00 - 14:30	Poster Session (Plaza San José) & Coffee

14:30 - 16:00	414. Evaluación de la amenaza volcánica en América Latina: métodos innovadores y oportunidades para las estrategias de reducción del riesgo y la transferencia de conocimiento
Abstract ID	Format: Oral presentations (10 + 2 min); ⚡ Lightning talk (5 + 1 min); Panel discussion



640	<b>Mapas de amenaza volcánica y plan de ordenamiento territorial en Colombia</b> <i>M.L. Monsalve, C. Laverde, G.P. Cortés, L. Martínez, L.G. Valencia, C. Muñoz, J.A. Ceballos, P. Narvaez, J. Galarza, R. Méndez</i>
682	<b>⚡ Cuantificación de Riesgo del volcán Nevado del Ruiz</b> <i>J.A. Ceballos Hernández, C.A. Laverde, L. G. Valencia</i>
558	<b>Actualización de mapas de amenaza por lahares en el volcán Santiaguito, utilizando datos de campo y modelos computacionales.</b> <i>C. Chun, J. Phillips, J. Cornejo</i>
678	<b>Mapa de Amenaza por Lahares (Flujos de Lodo y Escombros) Complejo Volcánico Atitlán-Tolimán, Guatemala</b> <i>D. Secaira, M. Moncada, I. Girón, Matheo Queché, Y. Pelicó, L. Capra, D. Ferres, L. Caballero</i>
468	<b>⚡ Acción Anticipatoria en Centro América. Cuando los mundos no colisionan: el humanitario y el científico.</b> <i>W. Zarate</i>
83	<b>Update of volcanic hazard maps for the five historically active volcanoes in Costa Rica (2020-2023)</b> <i>G. E. Alvarado, Y. Alpizar-Segura, D. Campos-Durán, J. Brenes-André, S. Núñez, L. Esquivel, B. Sánchez, P. Hidalgo, J. Sibaja</i>
24	<b>⚡ Vigilancia del lago cratérico hiperácido Poás (Costa Rica) con drones, 2021-2023: Una metodología rápida y segura para los vulcanólogos</b> <i>J.P. Sibaja-Brenes, R. Alfaro-Solis, M. Martínez-Cruz, I. Godfrey, A. Terada, M. de Moor, G. Avaró, G. Alvarado Induni</i>
343	<b>⚡ Evaluación probabilística de la amenaza por caída de balísticos para el volcán de San Salvador.</b> <i>R.A. Castro Cárcamo</i>
140	<b>Long- and short-term volcanic hazard assessment of El Chichón Volcano (Mexico) through Bayesian inference</b> <i>M.A. Alatorre-Ibargüengoitia, K. Hernández Urbina</i>

16:00 - 16:30

Coffee Break and Posters

<b>16:30 - 17:30</b>	<b>414. Evaluación de la amenaza volcánica en América Latina: métodos innovadores y oportunidades para las estrategias de reducción del riesgo y la transferencia de conocimiento</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (10 + 2 min); ⚡ Lightning talk (5 + 1 min); Panel discussion</i>
386	<b>Acciones Anticipatorias frente a la amenaza volcánica. Lecciones aprendidas de un nuevo paradigma global</b> <i>S. Ortiz</i>
88	<b>⚡ Numerical simulation of massively destructive lahars derived from ice-clad volcanoes: the case of Cotopaxi volcano, Ecuador</b> <i>F.J. Vasconez, J. Phillips, M. Woodhouse, S.D. Andrade</i>
381	<b>⚡ Probabilistic hazard assessment for pyroclastic density currents based on calibrated simulations at Tungurahua volcano, Ecuador</b> <i>A. Aravena, A. Tadini, A. Bevilacqua, P. Samaniego, B. Bernard, S. Hidalgo, J.-L. Le Pennec, P. Martínez, J. García, O. Roche</i>
689	<b>Evaluación de vulnerabilidad y riesgo de los volcanes Lascar, San Pedro y Ollagüe</b> <i>A. Esquivel, F. Aguilera, P. Ortiz, M. Rivera, T. Gonzalez, I. Bascuñán, M.-P. Reyes-Hardy</i>
	<b>Panel discussion (20 min)</b>

17:30 - 18:30

Poster session- Plaza San José

<i>Abstract ID</i>	<b>103. Volcano geology and mapping for hazard assessment, risk and resource-management, and building cultural value of the territory</b>
3	<b>Análisis de susceptibilidad por remociones en masa en el volcán Llama (Andes del Sur), a partir métodos cuantitativos y cualitativos</b> <i>A. Salgado Cifuentes, J. Romero Moyano</i>
138	<b>La caída de ceniza de Soche de 8.6 ka AP, un indicador de erosión del suelo en el norte de Ecuador</b> <i>P. Chávez, A. Gorki Ruiz</i>
183	<b>New geological mapping 1:5000 scale of La Fossa cone, Vulcano Island, providing insights on the eruptive behaviour and hazard assessment</b> <i>F. Lucchi, G. De Astis, R. Sulpizio, C.A. Tranne, G. González Llama, J. Natale, M. Roverato, P. Dellino</i>
328	<b>Registro eruptivo Plioceno tardío – Pleistoceno del cluster volcánico Nieve, campo volcánico Michoacán - Guanajuato (México)</b> <i>D.-R. Avellán, J.L. Macías, M.G. Gómez-Vasconcelos</i>
345	<b>An ignimbrite of wide distribution in the Western Central Valley of Costa Rica: compositional characterization of Puente de Mulas ignimbrite</b> <i>C. Coto, N. Montoya, L. Arias, D. Solís, J. Nimblett, P. Hidalgo, G. J. Soto</i>
548	<b>Análisis de vulnerabilidad física y riesgos ante corrientes de densidad piroclástica y lahares en el Volcán Santiaguito, Guatemala.</b> <i>M. Moncada Vásquez, I. Girón Melgar, M. Queché Mejía, D. Secaira Ziegler, Y. Pelicó, E. Maldonado Moreno, L. Capra Pedol, D. Ferrés López, L. Caballero García, A. Nieto Torres</i>
598	<b>Soil and soil-gas surveys for geothermal exploration at Tenerife, Canary Islands</b> <i>A. Martín-Lorenzo, N.M. Pérez, G.V. Melián, F. Rodríguez, M. Asensio-Ramos, C. Amonte, P.A. Hernández, E. Padrón</i>
707	<b>Monitoreo del Campo Geotérmico Moyuta</b> <i>C. Chun, J. Girón, D. González, L. Montejo, G. Olmos, A. Reiche</i>
713	<b>Glacial stages in the Galeras Volcanic Complex</b> <i>I. Zuluaga, D. Palechor, A. M. Correa-Tamayo, B. Pulgarín, S. Villamil, S. Villota, Y. Cruz-Toro, S. Castilla, L. Acosta, H. Patiño</i>
719	<b>Surface morphology reveals the dynamics of the emplacement mechanism of Piedras Negras and Middle Mezquital lava domes</b> <i>S. Salinas, I. Quijada, A.A. Márquez Salazar, J.J. Zamorano Orozco</i>
760	<b>La historia eruptiva de Isla Clarión y escenarios de riesgos</b>

760	A. P. Ruiz Galindo, M.J. Rodríguez Delgado, N. Varley, J. Roberge
<b>Abstract ID</b>	<b>304. Towards ethnovolcanology in Latin America: Plural perceptions of volcanism, place attachment and disaster risk in ancestral volcanic lands</b>
490	<b>Mam and K'iche' Mayan Ceremonial Rites with Active Volcanic Landscapes</b> C. Reed, A. Donovan, A. Hicks

<b>Abstract ID</b>	<b>401. Temporal and Spatial Evolution of the Internal Structure of Active Volcanic Systems</b>
28	<b>Localisation and Characterisation of volcanic high-frequency tremor above 10 Hz on Mount Etna</b> M. Weber, C.J. Bean, P. Smith, I. Lokmer, L. Zuccarello, S. De Angelis, J. Soubestre, V. Minio
31	<b>Evidencia de migración de magma a partir de tomografía sísmica 4D para el Complejo volcánico Chiles-Cerro Negro, Frontero Colombia-Ecuador</b> J.M. Londoño, R. Torres
45	<b>Estudio de Sismicidad en la Región de La Caldera de La Primavera, Jalisco. México</b> F.J. Núñez Cornú, G. Solorio Magaña, C.B.M. Quinteros Cartaya, C.A. Rowe, D. Núñez Escribano
91	<b>Nuevo aporte de magma en el volcán Nevado del Ruiz para el período 2018-2023</b> J.M. Londoño, R. Torres
189	<b>Laboratory insights on volcano stability and triggering following earthquakes</b> A. Lamur, J.E. Kendrick, L. Schaefer, B. Kennedy, Y. Lavallée
227	<b>Pump-probe monitoring of the Mount St. Helens magmatic system using slow fault slip and receiver functions</b> J. Bryan, W.B. Frank, P. Audet
247	<b>Understanding the evolution of magma systems between two supereruptions to support inter-agency planning and unrest response</b> K. Mauriohoho, C.J.N. Wilson, B.L.A. Charlier, S.J. Barker, I. Chambefort, G.S. Leonard
279	<b>The late Holocene Nealtican lava-flow field, Popocatepetl volcano (Mexico): Emplacement dynamics and future hazards</b> I. Ramírez-Uribe, C. Siebe, M.O. Chevrel, D. Ferres, S. Salinas
304	<b>Spatial and temporal variation of the Q coda during the pre-eruptive phase of Tajogaite eruption.</b> I. Cabrera-Pérez, L. D'Auria, E. Del Pezzo, J. M. Ibáñez, J. Soubestre, J. Barrancos, G. D. Padilla, V. Ortega-Ramos, N. M. Pérez
385	<b>Volcanic rocks can indicate when eruptions will end: geochemical and mineralogical time series trends in lavas, Tajogaite, La Palma, 2021</b> J. H. Scarrow, M.J. Pankhurst, O.A. Barbee, K.J. Chamberlain, D.J. Morgan, D.A. Neave, J. Hickey, M.-A. Longpré, S. Tramontano, P. Wieser, B.C. Coldwell, W. Hernández, A.G. Stewart, G.K. Rollinson, L. D'Auria, N.M. Pérez
412	<b>The value of time-lapse gravity monitoring at active volcanoes in Ecuador</b> J. Salgado, M. Córdova, A. Calahorrano, E. Gaunt, P. Mothes, P. Espin, M. Yepez, A. Herrera
451	<b>Lava emplacement and eruptive history of scoria cone Piedra de Chinos, Sangangüey region: implications for future hazards</b> H. Mendoza Martín, S. Salinas, A. Márquez Salazar, S. Ortiz
509	<b>Seismicity and Deformation Accompanying Eruption Cycles at Basaltic Caldera Volcanoes in the Galápagos Islands, Ecuador</b> A.F. Bell, S. Hernandez, P.C. La Femina, S. Butcher, M. Ruiz, P.M. Gregg, M. Head, C.J. Bean
543	<b>Reconstructing the Neapolitan volcanism prior to the 39.8 ka Campanian Ignimbrite: results from a scientific drilling north of Naples (Italy)</b> D. Sparice, S. de Vita, M.A. Di Vito, C. Pelullo
555	<b>Preliminary investigation of fluids emitted from Eldfell volcano (Iceland)</b> F. Grassa, M. Liuzzo, M. Pfeffer, A.L. Rizzo
654	<b>Observing and modelling Fernandina volcano deformation with ecuadorian volcano SAR imagery until September 2023</b> S. Aguiza, P. Mothes, M. Battaglia
701	<b>Caracterización de la actividad explosiva del volcán Sabancaya entre el 2022 y 2023 a través de registros acústicos</b> R.M. Ancasi Figueroa, A. Ramos Figueroa, M. Ortega Gonzales, R. Miranda Cruz
756	<b>Classification, textures and eruption history of the youngest lava dome in the Tatun Volcanic Group, northern Taiwan</b> H.-Y. Tang, Y.-M. Lai, Y.-H. Lee, S.-R. Song

<b>Abstract ID</b>	<b>403. Multidisciplinary investigations to unravel the structure and dynamics of active volcanic systems</b>
17	<b>The impacts of lulls and peaks in eruption rate on lava flow propagation: insights from analog experiments</b> S.I. Peters, A.B. Clarke, E.L. Rader
19	<b>Paleoenvironmental Constraints on Pleistocene Ice Sheets Informed by Glacio-Volcanic Deposits in Northeast Iceland</b> C.D. Essex, B.I. Cameron, B.R. Edwards, M.T. Guðmundsson
34	<b>Preliminary textural and petrological insights from the recent eruptive products of Fuego and Pacaya volcanoes, Guatemala</b> W. Mustafa, E. Nicholson, C.M. Petrone
114	<b>Modelación Estocástica de Dependencia Geomorfológica en el Campo Volcánico Michoacán-Guanajuato, México, Utilizando Teoría de Cópulas</b> J. Aguilar-Tomasini, A. T. Mendoza-Rosas, D.A. Gómez-Calderón
133	<b>Detección de ascenso de magma y evolución del proceso eruptivo del volcán Ubinas 2023</b> J. Chalco, M. Ortega, F. Apaza, J. Alcántara, R. Ancasi, R. Paxi, O. Macedo
135	<b>Amp-TB2 protocol, a thermobarometric model for constraining magma feeding systems of amphibole-bearing volcanoes: the example of Bezymianny volcano, Kamchatka</b> F. Ridolfi, R. Almeev, A. Yu Ozerov, F. Holtz
160	<b>Magma plumbing system of Ito volcano, Ogasawara, Japan: A petrological constraint</b> T. Miwa, M. Nagai, H. Ueda, T. Kozono, S. Nakada, A. Yasuda

187	<b>Compositional heterogeneities in minerals provide insights in the evolution of the volcanic plumbing system of the 2021 Tajogaite eruption, La Palma, Spain</b> <i>J. Pahl, S. Chakraborty, A. Cambeses, R. Dohmen</i>
190	<b>2D numerical simulation of the shallow magmatic body at Krafla</b> <i>G. Girela Arjona, P. Papale, D. Garg, C. Montagna, S. Colucci, A. Longo</i>
197	<b>Transient gas emission during sintering and vesiculation of pyroclasts in volcanic conduits</b> <i>J. Schunke, J. Evan Kendrick, A. Lamur, Y. Lavallée</i>
228	<b>Probabilistic hazard analysis of active volcanoes based on energy partition</b> <i>A. Guerrero, P. Tierz, V. Burgos Delgado, A. Folch</i>
318	<b>The current state of Tenerife (Canary Islands): a geophysical insight.</b> <i>R. García Hernández, A. Álvarez Hernández, J. Barrancos Martínez, I. Cabrera Pérez, L. D'Auria, D. Martínez van Dorth, G. D. Padilla Hernández, M. Jiménez Mejías, M. Przeor, V. Ortega Ramos, N. Pérez Rodríguez</i>
335	<b>Crustal structure beneath San Miguel volcano, El Salvador, estimated from ambient noise recordings</b> <i>K. Pineda, T. Hayashida</i>
346	<b>Post-eruption volcano-ice interactions at Mount St. Helens: Application of multidisciplinary approaches to unravel changes in volcanic heat output</b> <i>L. Sobolewski, C. Stenner, L. J. Florea, E. U. Zorn, A. I. Gomez-Patron, S. A. Burgess, A. Ionescu, T. H. Hansteen, E. Cartaya, A. Pflitsch</i>
359	<b>Assessment and optimisation of seismic network design to detect magma migration using SARA</b> <i>T. Espinosa-Ortega, K. E. James, C. T. Tan, B. Taisne</i>
362	<b>Fluids migration and earthquakes at Campi Flegrei caldera: interpretation of the ongoing unrest from gravity and seismic data</b> <i>T. Pivetta, S. Carlino, N. A. Pino, S. Danesi, U. Riccardi</i>
392	<b>Investigating the relationship between deep long period earthquakes and volatile saturation depth and exsolution in the Alaska-Aleutian Subduction zone using geophysical and geochemical data</b> <i>K. McKee, K. Daly, C. Cauley, Y. Li, E. Rojas-Kolomietz, A. Ward, D. Roman, P. Wieser, P. Wallace, T. Fischer, J. Power, T. Plank</i>
398	<b>Architecture of the Three Sisters magmatic system imaged from gravity data</b> <i>H. Le Mével, N. Andersen, A. Dechert, J. Dufek</i>
407	<b>AVERT: An open system for multi-parameter volcano monitoring</b> <i>C.A. Bacon, T.A. Plank, E. Lev, N. Frearson</i>
441	<b>Actividad volcánica asociada a procesos de formación y destrucción de domos de lava en el volcán Sabancaya, 2019 – 2022</b> <i>M. Ortega, W. McCausland, R. White, F. Apaza, J. Chalco</i>
442	<b>Una metodología para el estudio de variaciones temporales de la atenuación sísmica en el Volcán Nevado del Ruiz (Colombia) mediante el uso de señales sísmicas generadas en el nido sísmico de Bucaramanga.</b> <i>J. Makario Londoño, B. Galvis Arenas</i>
444	<b>Estudio aeromagnético en el área del volcán Pelado, campo mono genético activo, Chichinautzin México.</b> <i>G. De la Puente Flores, T. González Morán</i>
482	<b>What mechanisms control transitions in explosive-effusive eruptions for pantellerite volcanoes?</b> <i>F. Haywood, R. Brooker, E. Llewellyn, F. B. Wadsworth, G. Kilgour, A. Rust</i>
486	<b>The evolution of a basaltic fissure eruption</b> <i>A. Loisel, E. W. Llewellyn, R. J. Brown, A. Capponi, T. R. Orr, M. R. Patrick</i>
487	<b>Determinación de la escala vertical en vídeos de erupciones volcánicas a partir del movimiento de clastos</b> <i>A. Loisel, E. W. Llewellyn, C. Tisdale, B. F. Houghton</i>
492	<b>The ties that bind: Using geochemistry, morphology and scoria cone distribution to untangle the Karthala-La Grille plumbing system(s), Grande Comore</b> <i>F.J.P. Lötter, A. Di Muro, N. Villeneuve, N. Lenhardt</i>
557	<b>Magnetotelluric survey for the Pantelleria Island geothermal exploration</b> <i>M.G. Di Giuseppe, R. Isaia, A. Troiano, M. Sposato, C. De Paola</i>
566	<b>Seismic Frequency Index (FI) to assess periods of unrest in San Miguel volcano using REDPY</b> <i>J.Y. Rivera Ayala, D. Lemus, K. Pineda, J. Wellik, S. Prejean</i>
583	<b>Transferring Machine Learning Models to New Systems via Incremental Learning</b> <i>J. Carthy, P. Rey-Devesa, M. Titos, C. Benítez</i>
602	<b>Magmatic hydrothermal fluid dynamics and surface emissions at Active volcanoes: A geochemical and geophysical multidisciplinary research</b> <i>Z.M. Villarreal, F. Aguilera, P. Salazar</i>
604	<b>A rapid outpouring of lava from the Great Crack of Kīlauea volcano in 1823 CE: How did it happen?</b> <i>A. Tonato, D.T. Downs, T. Shea, K. Kelfoun, A. Harris</i>
644	<b>Constraining the active structures during the recent unrests at Campi Flegrei caldera (southern Italy) through seismicity analysis and electromagnetic imaging</b> <i>J. Natale, S. Vitale, R. Isaia, M. Giulia Di Giuseppe, A. Troiano</i>
668	<b>Identificación y evaluación de analitos lixiviables en la ceniza emitida por el volcán Sabancaya, Perú</b> <i>P. Masias, S. Chaupi, J. Lopa, F. Apaza</i>
749	<b>Descifrando precursores de muy corto plazo en un volcán activo con lago cratérico hiperácido y caliente: Caso de estudio en el volcán Rincón de la Vieja, Costa Rica</b> <i>H. Bakkar Hindeleh, J.F. Pacheco Alvarado, C. Sánchez Viquez</i>

<b>Abstract ID</b>	<b>407. Evaluating secondary volcanic hazards: methodologies, recent advances and still open questions</b>
109	<b>Landslides as a secondary hazard during volcanic crises: multidisciplinary evaluation of slope instability during the 2021 Vulcano Island (Italy) unrest</b> <i>P. Madonia, G. Bilotta, M. Bisson, B. Calusi, M. Cerminara, M. de' Michieli Vitturi, M. A. Di Vito, R. Gianardi, M. Polcarì, C. Spinetti, C. Tolomei, G. De Astis</i>
111	<b>Correlation of stage height and seismo-acoustic energetics for monitoring rain-triggered lahars at Volcán de Fuego, Guatemala</b>

111	<i>A.R. Bosa, G. Bejar, G.P. Waite, J.C. Mock, A. Pineda, A. Roca, R.M. Boogher</i>
178	<b>The wildfire impact detected by remote sensing data: the case of 3<sup>rd</sup> July 2019 paroxysm at Stromboli island</b> <i>F. Iacono, M. Bisson, C. Spinetti, T. Kwasnitschka</i>
179	<b>Lahares secundarios e inundaciones en volcanes en reposo, estudio de caso: ciudad de Ibarra, volcán Imbabura-Ecuador.</b> <i>S. Solano, A. Gorki Ruiz, L. Troncoso, J.-L. Le-Pennec, W. Navarrete, G. Erazo, B. Cáceres, R. Vega</i>
243	<b>Secondary hazards and the multi-disciplinary challenge: a roadmap towards multi-hazard collaboration with the world of hydrometeorology.</b> <i>A. Tupper, G. Leonard</i>
423	<b>Exploring granular flow dynamics in narrow channels: advancements in electronic instrumentation and simulation for scaled experiments</b> <i>J. A. Montenegro-Ríos, G. M. Rodríguez-Liñán, D. Sarocchi, L. Capra, V. H. Márquez-Ramírez, L. D. S. H. Hernández, O. A. Segura Cisneros, T. A. Huerta Alejo</i>
453	<b>Lahars escenarios in Pico de Orizaba and their relationship with climate change</b> <i>A. A. Márquez Salazar, S. Salinas</i>
456	<b>Study of the San Nicolás lahar deposit at Popocatepetl volcano (Puebla, Mexico): preliminary results</b> <i>D. Sarocchi, T.A. Huerta Alejo, L. Caballero, L. Arana-Salinas, F. Dioguardi, N. Nedumpallile-Vasu</i>
457	<b>A Molecular Dynamics algorithm to study dry granular geological flows composed of non-spherical particles</b> <i>G.M. Rodríguez-Liñán, D. Sarocchi, L. Capra</i>
499	<b>SAR polarimetric measurements to detect lava flows under different volcanic environments</b> <i>E. Ferrentino, C. Bignami, F. Nunziata, S. Stramondo, M. Migliaccio</i>
529	<b>Active OP-FTIR measurements reveals water vapor and methane chloride emissions from Salinelle mud volcanoes, Paternò (Sicily, Italy)</b> <i>P. Bonfanti, A. La Spina</i>
610	<b>SedCas_Volcano: a novel approach to modelling decadal evolution of lahar hazard following explosive eruptions.</b> <i>J. Christie, G. Bennett, J. Barclay</i>
653	<b>Change detection and monitoring of barrancas through regular UAV surveys on Fuego Volcano, Guatemala</b> <i>J. C. Mock, R. Boogher, J. B. Johnson</i>
690	<b>Evaluation of the wall friction angle of dry volcanic materials from laboratory experiments.</b> <i>I. Rucco, F. Dioguardi, D. Sarocchi, M. A. Di Vito, R. Ocone</i>
762	<b>Application of the experience with INETER's Earthquake Early Warning System for volcano related warnings in Nicaragua</b> <i>W. Strauch, V. Tenorio, E. Talavera</i>

<b>Abstract ID</b>	<b>410. Shallow submarine and marine-emergent volcanism: Marine tephra, physical processes, risks, response, and monitoring</b>
239	<b>Discovery of a major normal fault along the Kolumbo Volcanic Chain reveals fundamental volcano-tectonic feedback mechanisms</b> <i>J. Preine, C. Hübscher, A. Woodhouse, O. Koukousioura, S. Chiyonobu, T. H. Druitt, S. Kutterolf, P. Nomikou, T. A. Ronge, S. Beethe, M. Manga, I. McIntosh, M. Tominaga, A. Bernard, C. Berthod, H. Chen, A. Clark, S. DeBari, T. I. Fernandez-Perez, R. Gertisser, R. M. Johnston, C. K. Jones, K. Batuk Joshi, G. Kletetschka, M. McCanta, A. Morris, K. Pank, A. Peccia, Paraskevi Polymenakou, Y. Yamamoto, A. Metcalfe, X. Li, G. Crutchley, J. Karstens</i>
260	<b>A giant shallow-marine pyroclastic-flow-eruption from ancestral Santorini discovered by IODP Expedition 398 - Objectives, challenges and results of deep drilling into Christiana-Santorini-Kolumbo volcanic field deposits</b> <i>S. Kutterolf, T. Druitt, T. Ronge, C. Hübscher, P. Nomikou, J. Preine, R. Gertisser, J. Karstens, J. Keller, O. Koukousioura, M. Manga, A. Metcalfe, M. McCanta, I. McIntosh, K. Pank, A. Woodhouse, S. Beethe, C. Berthod, S. Chiyonobu, H. Chen, A. Clark, S. DeBari, R. Johnston, A. Peccia, Y. Yamamoto, A. Bernard, T. Fernandez Perez, C. Jones, Kumar B. Joshi, G. Kletetschka, X. Li, A. Morris, P. Polymenakou, M. Tominaga, D. Papanikolaou</i>
351	<b>Foraminiferal response to volcanic eruptions in the Hellenic Volcanic Arc, Aegean Sea</b> <i>O. Koukousioura, A. Woodhouse, S. Chiyonobu, T. Druitt, S. Kutterolf, T. Ronge, and IODP Expedition 398</i>
374	<b>Instalación de la Primera Red Argentina de Monitoreo Volcánico Permanente en la Isla Decepción</b> <i>S. García, G. Badi, V. Preatoni, A. Casas, G. Acosta</i>
410	<b>SANTORY: Preliminary results of monitoring Kolumbo volcano (Santorini, Greece)</b> <i>P. Nomikou, P. Polymenakou, S. Scirè Scappuzzo, G. Lazzaro, A. Mallios, F. Grassa, K. Karantzalos, S. Spanos, V. Douskos, C. Antoniou, J. Escartin, T. Mertzimekis, F. Italiano, A. L. Rizzo, M. Longo, W. D'Alessandro, A. Katsigera, D. Lampridou and SANTORY Team</i>
443	<b>Revisión de isla San Benedicto a 71 años de la formación del cono Bárcena 1952-1953, archipiélago de Revillagigedo, México</b> <i>R. H. Téllez Vizcaino, P. Dávila Harris, Y. Rojas-Agramonte, J. M. Koornneef, P. C. Lippert, M. Philippon, D.J.J. Van Hinsbergen</i>
476	<b>The magma system of Santorini volcano after the Late Bronze Age eruption: into a new caldera cycle</b> <i>R. Gertisser, N. Keeley, C. Petrone, T. Druitt, S. Kutterolf, T. Ronge, S. Beethe, A. Bernard, C. Berthod, H. Chen, S. Chiyonobu, A. Clark, S. DeBari, T. I. Fernandez Perez, C. Hübscher, R. Johnston, C. Jones, K. Batuk Joshi, G. Kletetschka, O. Koukousioura, X. Li, M. Manga, M. McCanta, I. McIntosh, A. Metcalfe, A. Morris, P. Nomikou, K. Pank, A. Peccia, P. Polymenakou, J. Preine, M. Tominaga, A. Woodhouse, Y. Yamamoto</i>
589	<b>The terrestrial and marine tephra record of the 1650 AD marine-emergent eruption of Kolumbo volcano, Greece: Challenges in eruptive stratigraphy and chronology.</b> <i>S.J. Mitchell, S. Kutterolf, A. Rust, P. Nomikou, A. Katsigera</i>

<b>Abstract ID</b>	<b>414. Evaluación de la amenaza volcánica en América Latina: métodos innovadores y oportunidades para las estrategias de reducción del riesgo y la transferencia de conocimiento</b>
30	<b>MUDAVA: Estrategias de unificación y optimización multidisciplinaria de datos para el análisis de volcanes</b> <i>Y. Gomez-Leyton, A. Esquivel Cáceres, P. Salazar Reinoso</i>
43	<b>Methodological design of a geological event tree on volcanic islands: case study of the Galapagos Islands</b> <i>M. Mulas, M. Menoscal, G. Bravo, D. Capa, E. Larreta, M. Borbor, D. Garces</i>
63	<b>Análisis gravimétrico y cálculo de la fuerza de un líquido en el volcán La Malinche, Puebla-Tlaxcala, México</b> <i>R. Ramos Aguilar, P. Máximo Romero, V. Galindo López, M. Ávila Cruz, M. D. Ramírez Álvarez, L. Cárdenas López, A. Eduardo Morales González, V. Covarrubias Salvatori, M. C. Vázquez García</i>
211	<b>Aportes de la hidrogeoquímica en la vigilancia del volcán Popocatepetl</b> <i>M. Aurora Armienta, S. De la Cruz-Reyna, Á. Gómez Vázquez, O. Cruz, A. Aguayo, O. Neri</i>
426	<b>Pyroclastic density currents and lahars hazard assessments for Volcán Santiaguito, Guatemala</b>

426	<i>L. Capra, K. Chun-Quinillo, G. A. Chigna Marroquín, E. J. J. Maldonado Moreno, R. Mérida Boogher, D. Ferrés López, A. M. L. Caballero García, M. Queché</i>
430	<b>ESTUDIO GEOLÓGICO DE PRODUCTOS EMITIDOS DURANTE LA ERUPCIÓN DEL VOLCÁN UBINAS DEL 2023</b> <i>N. Manrique, J. Mariño, K. Cueva, J. Cuno, D. Arteaga, A. Pari, C. Palacios, A. Ancalle, Y. Huamaní, C. Quispe, G. Paredes, S. Japura</i>
438	<b>Hazard exposure ranking for population centres in the Central Andes of Chile and Argentina</b> <i>D. Bertin, J. M. Lindsay, S. J. Cronin, S. L. de Silva, C. B. Connor, P. J. Caffè, P. Grosse, W. Báez, E. Bustos, R. Constantinescu</i>
547	<b>LAHAR HAZARD MAPPING AT MISTI VOLCANO, AREQUIPA, PERU</b> <i>J. Cuno Bayta, K. Cueva Sandoval, J. Mariño, C. Harpel, A. Pari, A. Ancalle, C. Quispe</i>
561	<b>Volcanological assessment of transitory meeting points for the management of volcanic crises in Chile</b> <i>F. Vera, F. Flores, C. Perales, L. Bono, J. Véliz, Á. Amigo</i>
632	<b>Análisis de los depósitos de caída piroclástica asociados a erupciones del complejo volcánico Cerro Bravo y su incorporación en la segunda versión del mapa de amenaza del complejo volcánico Cerro Bravo.</b> <i>L. Martínez, M. L. Monsalve, L. G. Valencia, J. Galarza</i>
712	<b>Evolución del Ranking de Riesgo Específico en Chile: aprendizajes y desafíos de los últimos 10 años de vigilancia volcánica.</b> <i>G. Pedreros Delgado, M. A. Contreras, M. Figueroa Vera, L. Bertin Brstilo, V. Toloza Toloza, C. Bengoa, Á. Amigo Ramos, C. Perales, F. Vera, L. Bono, F. Flores</i>

<i>Abstract ID</i>	<b>417. Forecasting volcanic hazards: new technologies and probabilistic multi-source and multi-hazard assessment combining HPC and field data</b>
174	<b>From the detection of monitoring anomalies to the probabilistic forecast of the evolution of volcanic unrest: an entropy-based approach</b> <i>W. Marzocchi, L. Sandri, S. Ferrara, J. Selva</i>
465	<b>Lava flow velocity in effusive contexts: a space-based approach using thermal data acquired by VIIRS</b> <i>A. Campus, M. Laiolo, O. Chevrel, A. Peltier, N. Villeneuve, A. Di Muro, D. Coppola</i>
478	<b>Developing a Catastrophe Bond for effusive eruptions</b> <i>K. Strehlow, N. Adler, M. Hanzich, A. Marti, J. M. Maurel, C. Rosas, L. Sousa, O. Tuinenburg</i>
571	<b>Evaluation of long-term volcanic activity and the first hazard map of Sumaco volcano, Ecuador</b> <i>J. Salgado, M. D. Córdova, P. Mothes, P. Espin, S. Vallejo, J. Aguilar, E. Gaunt, E. Telenchana, P. Samaniego, R. Cuesta, D. Lincango, X. Vivas</i>
579	<b>Hybrid modeling of volcanic hazards: blending machine-learning approaches and physics-based simulations</b> <i>V. Zago, E. Amato, C. Del Negro</i>
770	<b>Machine learning for volcano deformation: moving beyond detection and classification to forecasting</b> <i>A. Hooper, M. Gaddes, C. Novoa Lizama, L. Shen, R. Bilsland, E. O'Grady, J. Sepulveda Araya, M. Lazecky, S. Ebmeier, D. Hogg, Y. Maghsoudi, R. Rigby, J. Biggs</i>
777	<b>Machine learning for data-driven discovery in volcanology</b> <i>A. B. Malaguti, S. Branca, C. Corradino, V. Zago</i>

<i>Abstract ID</i>	<b>418. Health hazards associated with volcanic emissions: quantifying emissions, assessing exposure, and informing mitigation</b>
236	<b>Behavioural, psychological and physiological impacts to occupants of civil aviation encounters with volcanic emissions</b> <i>C. J. Horwell, S. Ravenhall, R. Clarkson, M. Edmonds, J. Rubin, C. Witham</i>
411	<b>Metal Toxicity in Human Populations Living Among Volcanoes</b> <i>S. Mikhail-Lee, K. Berlo</i>
481	<b>Silicate volcanic ash at the PM10 level: integrating compositional and 3D particle characteristics to assess long-term effects of a short-term hazard</b> <i>B. Coldwell, D. Wertheim, L. Miyashita, S. Crust, I. Gill, R. Giddens, J. Grigg, N. M. Pérez, N. Pefford</i>
502	<b>Bioreactivity of sub-10 µm geogenic particles: comparison of volcanic ash and desert dust</b> <i>I. Tomašek, J. Eychenne, D. E. Damby, A. Hornby, M. N. Romanias, S. Moune, G. Uzu, L. Blanchon, V. Sapin</i>
577	<b>Forecasting small SO2 rich plumes during the Fagradalsfjall eruptions 2021-2023: challenges for reliable concentrations</b> <i>S. Barsotti, M. A. Pfeffer, E. Ilyinskaya, R. C. W. Whitty, T. Barnie, Manuel, S. Arellano, G. N. Petersen, R. H. Brastarson, A. Folch, L. Mingari, H. Ívarsdóttir</i>
758	<b>Health research during volcanic eruptions: Lessons from multiagency responses in Hawai'i</b> <i>D. Damby, on behalf of a wonderful team of scientists and practitioners</i>
780	<b>A physicochemical analysis of volcanic ash from Sinabung volcano, Indonesia, for respiratory health hazard assessment</b> <i>C. L. R. Gold-Taylor, C. J. Horwell, L. G. Marvin, J. Najorka, L. Bowen, K. A. Macintosh</i>

<i>Abstract ID</i>	<b>433. Technological innovation for scientific outreach and teaching among communities exposed to volcanic eruptions</b>
294	<b>Volcano Voices: a multifaced map-based tool to collect and share narratives on volcanic environments</b> <i>J. Morin, R. Walshe, A. Donovan, M. Lucas-Smith, C. Smith</i>



Last update: 05/02/24

Cities on Volcanoes 12 Program



Themes	1. Volcanoes and sustainable development	2. Volcanoes, the humanities and creative Arts	3. Volcanoes and their social, cultural, and political context	4. From volcano monitoring and hazard assessment to risk management
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Thursday, February 15

<b>8:00-10:00</b>	<p>Centro Cultural César Brañas Inaguration and Opening Ceremony (Open to public)  <b>Plenary Session 3: Community and Indigenous voices in Disaster Risk Reduction</b>                  Alex Petzey, Christine Kenney, Clyornique Williams, Edy Maldonado</p>
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**Room Landivar**

10:30 - 12:00	427. Stakeholder needs: Communication for decision-making during crises
Abstract ID	<i>Format: Oral presentations (10 min); ⚡ Lightning talks (3 min); Group discussion</i>
244	<b>A Timeline for Volcanic Eruption and Response Coordination</b> <i>B. Terbush</i>
709	<b>Raising the alert level at a caldera: the 2022-2023 unrest episode at Taupō volcano, Aotearoa New Zealand</b> <i>N. Fournier, GeoNet Volcano Monitoring Group</i>
93	<b>Social media: A fast-paced, on-demand communication tool that can help people make informed decisions during a crisis.</b> <i>E. Westby, W.K. Stovall, M. Poland, K. Mulliken, J. Ball, S. Horvath</i>
300	<b>⚡ Comparación de las escalas temporales de erupción y evacuación en el Volcán de Fuego (Guatemala) para una mejor comprensión del riesgo</b> <i>A. Naismith, T. Armijos, J. Phillips, J. Barclay, I.M. Watson, W. Chigna, G. Chigna</i>
222	<b>⚡ KAIROS AI-digital solution for predicting adverse sulphur clouds impacting airspace operations</b> <i>H. Brenot, A. Jardines, J. Garcia-Heras Carretero, M. Piot, N. Theys, I. Martínez, N. Manzano, M. Soler, M. Van Roozendael</i>
	<b>Group discussion (45 min)</b>

12:00 - 13:00	429. "Can everyone understand us?": Communicating risk to vulnerable populations in volcanic areas
Abstract ID	<i>Format: Oral presentations (12 + 3 min)</i>
303	<b>Does everyone know of volcanic risk?: Communicating via inclusive and accessible Warning Systems so that everyone can understand</b> <i>C.J. Fearnley, R. Yore, M. Fordham, I. Kelman</i>
726	<b>Following in the footsteps of the Kūtralkura Giants: a collaborative project to address and build resilience to volcanic hazards in Chile.</b> <i>M.A. Contreras Vargas, C. Geoffroy, S. Vargas, G. Pedreros, T. Venegas, G. Tascon</i>
370	<b>Outreach and engagement strategies for scientific divulgation in volcanic areas: the Galeras and the Ánimas Volcanic Complexes study-cases, Colombia</b> <i>S. Castilla, A.M. Correa-Tamayo, S. López, L. Acosta, S. Villamil, M. Tamayo, I. Zuluaga, Y. Cruz-Toro, D. Palechor, S. Villota, L. Villamil, A. Hamon</i>
274	<b>Mountain Aglow: Evaluation of a novel co-created science and arts-based exhibit to communicate volcanic risk on the island of Montserrat</b> <i>J. Christie, J. Barclay, K. Pascal, T. Armijos, K. Retourné</i>

**13:00 - 14:00 COV Outreach Exchange**

**13:00 - 14:00 Lunch**

**14:00 - 14:30 Poster Session (Plaza San José) & Coffee**

14:30 - 15:00	429. "Can everyone understand us?": Communicating risk to vulnerable populations in volcanic areas
Abstract ID	<i>Format: Oral presentations (12 + 3 min)</i>
306	<b>Geoheritage for Resilience – a community-focused UNESCO International Geosciences Programme Project for risk communication</b> <i>B. van Wyk de Vries, M.-N. Guilbaud, M. del P. Ortega Larrocea, F. Martínez Balez Tellez, S. Eridani Zaragoza, C. Shires, S. Cram, J. Morin, N. Manrique, R. Aguilar, E. Espinosa, D. Chavarria, W. Martinez, M. Hagos, M. Lagmay, J. Santiago, N. Irapta, V. Vereb, V. Zakharovskiy, K. Nemeth</i>
79	<b>Integrating Active-Learning and the Protective Action Decision Model to Motivate Household Volcanic Risk Reduction and Action</b> <i>B.D. Brand, A. Bosa</i>

15:00 - 15:30		430. Communication is tuff: Conveying challenging topics in volcanology
Abstract ID	<b>Format: Oral presentations (10 min) &amp; ⚡ Lightning talks (2 min)</b>	
593	<b>Comunicación y divulgación volcanológica para la Gestión del Riesgo de Desastre (GRD)</b> <i>D. Gutiérrez Arriagada, F. Aguilera, P. Canales</i>	
507	<b>⚡ Scientists as Story-tellers: the explanatory power of stories told about volcanic crises</b> <i>J. Barclay, R. Robertson, T. Armijos</i>	
633	<b>⚡ Communicating low-probability, high-consequence volcano hazards by comparing relative eruptive histories to support community planning for volcano risk management</b> <i>J. Wilson</i>	
248	<b>⚡ Let us know! Have we captured the most important considerations for communicating hazard and uncertainty on maps?</b> <i>J. Lindsay, E. Calder, S. Ogburn, H. Wright, D. Bertin, D. Charlton, B. Steinke</i>	
596	<b>Altering perspectives to enhance the efficacy of volcanic hazard communication for decision-makers: Novel approaches in Montserrat, West Indies.</b> <i>J.M. Marrero, G.A. Ryan, B.C. Williams, T. Williams</i>	

15:30 - 16:00		428. Un pilar prioritario en la gestión del riesgo - la comunicación
Abstract ID	<b>Format: Oral presentations (13 min); ⚡ Lightning talks (5 min)</b>	
208	<b>Un semáforo de alerta volcánica enfocado en la población, una componente de la gestión integral del riesgo: caso del Popocatepetl</b> <i>S. De la Cruz-Reyna</i>	
510	<b>Hacia un protocolo de comunicación interinstitucional para la reducción del riesgo volcánico en Guatemala</b> <i>D. Ferrés López, I. Girón Melgar, M. Moncada Vázquez, A.E. Roca Palma, R. Mérida Boogher, G. Chigna Marroquín, J.J. Maldonado Moreno, M.E. Ovalle Fernández, J. L. Mejicanos Reyes Reyes, W.F. Chigna Yuque, L. Caballero, L. Capra Pedol</i>	

**16:00 - 16:30** **Coffee Break and Posters**

16:30 - 17:30		428. Un pilar prioritario en la gestión del riesgo - la comunicación
Abstract ID	<b>Format: Oral presentations (13 min); ⚡ Lightning talks (5 min)</b>	
551	<b>Estrategia marco, para acciones de comunicación, ante emergencias relacionadas con fenómenos naturales en El Salvador</b> <i>J. Rivera, R. Cerón, C. Rivas, A. Renderos, L. Montenegro, C. Tejada</i>	
625	<b>Fortalecimiento de Capacidades en Gestión Integral del Riesgo por Actividad volcánica a nivel Local y Municipal en el Volcán Santiaguito.</b> <i>E.J.J. Maldonado Moreno, J.C.L. Aragón de Paz, J.D. Ovando Arreaga, J.E. Quezada Pimentel, Y.O. Pelicó Pérez, A.E. Roca Palma</i>	
90	<b>Social media and media: a new and effective way to communicate volcanic hazards to a wide range of people in Colombia.</b> <i>J.M. Londoño, V. Londoño, L. Campos, L.M. Castaño</i>	
117	<b>Acciones preventivas y educativas realizadas en los parques volcánicos de Costa Rica del 2001 al 2023</b> <i>B.E. Sánchez Ureña, G.E. Alvarado, L. Esquivel, R. Araya, Y. Alpizar-Segura</i>	
524	<b>⚡ El rol que cumple la población expuesta a peligros volcánicos en la Patagonia Chilena, diferencias con otras zonas, cuales son sus limitantes y como se gestiona el riesgo.</b> <i>A. Aguilar Sánchez</i>	

**17:30 - 18:30** **Poster Session (Plaza San José)**

**Room San José**

10:30 - 13:00		311. Making the magic happen: methods and case studies for interdisciplinary knowledge exchange in volcanic risk
Abstract ID	<b>Format: Oral presentations (10 min); ⚡ Lightning talks (5 min); Group discussion</b>	
601	<b>Las Voces del Agua: caracterización transdisciplinar del agua en un geo-ecosistema volcánico del suroccidente de Colombia</b> <i>S. Cañas, N. Pardo, C. González-Arango, N. Palacios</i>	
764	<b>Recognising, honouring, cultivating community agency: the co-production of collective knowledge for disaster risk reduction</b> <i>M. Johnson, S. Yorke, C. Durrant, R. Robertson, J. Barclay, J. Phillips, T. Armijos Burneo, B. Davies, J. Christie</i>	
766	<b>The Montserrat Volcano Babies project: a local take on international research impacts</b> <i>K. Pascal, T. Williams, J. Barclay, D. Pyle, B. Davis, G.E. Ryan, E.P. Joseph</i>	
619	<b>Co-development of Hazard Models with Communities as a Restorative Practice: The 2005 Debris Flow at Panabaj, Guatemala</b> <i>J. Phillips, T. Armijos, D. Ruanda Sapalú, A. Petzey Quijejú, M. Reanda, M.C. Reanda, Á. Xicay, D. Alvarado, M. Woodhouse, R. Escobar Wolf</i>	
475	<b>Community Resignification of a Red Zone: Decolonial-Participatory Research Process in Panabaj Territory (Guatemala)</b> <i>C. Sala-Valdes, T. Armijos Burneo, D.A. Ruanda Sapalú, A.B. Petzey Quijejú, E. Calder, J. Phillips</i>	



218	<b>Sensors as a tool to understanding hazards and connecting people in hazard-prone zones.</b> <i>M. Encalada Simbaña, J. Barclay, T. Armijos</i>
383	<b>⚡ Insights into interdisciplinary volcanology from the PREVIA project study of Apoyeque, Nicaragua: Preparation and Resistance to Eruption of IberoAmerican Volcanes</b> <i>J.H. Scarrow, C. Argüello-Gutiérrez, M. Danišik, A. K. Schmitt, A. García-Yeguas, J. Garrido Manrique, M. del P. Ibarro-Dávila, S.E. Layton Jaramillo, E. Espinoza Jaime, J.A. Saballos Pérez, C. Gutiérrez Gutiérrez, W. Strauch, S. Balladares-Navarro, L. Lechado-Ríos, M.I. Toruño Alvarez</i>
463	<b>Collaborative modular scenario development for caldera volcanic risk management: Caldera volcanoes in Taupō Volcanic Zone, Aotearoa – New Zealand.</b> <i>R. Calderon, T. Wilson, G. Leonard, S. Beaven, T. Robinson, J. Hayes, C. Wilson, S. Barker, F. Illsley-Kemp, Calder Advisory Group (NZ)</i>
505	<b>⚡ Unleashing the power of community engagement for volcanic disaster risk reduction</b> <i>J. Barclay, T. Armijos, R. Robertson, J. Phillips, A. Hicks, R. Few, K. Pascal, M. Johnson, D. Pyle, M. Encalada, P. Cole, E. Sevilla, STREVA Team</i>
<b>Group discussion (60 min)</b>	

<b>13:00 - 14:00</b>	<b>Lunch</b>
<b>14:00 - 14:30</b>	<b>Poster Session (Plaza San José) &amp; Coffee</b>

<b>14:30 - 16:00</b>	<b>303. The Indigenous voice in volcanology: seeking pathways towards co-production of knowledge</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12 + 3 min)</i>
643	<b>Renacer derechos, lo que significa vivir en un territorio de alto riesgo: El caso del cantón Panabaj (Santiago Atitlán, Guatemala)</b> <i>D.A. Reanda Sapalú, A.B. Petzey, C. Sala, T. Armijos</i>
283	<b>Tino Rangatiratanga &amp; Volcanic Risk Management in Aotearoa New Zealand</b> <i>K.L. Thomas (Ngāti Mutunga o Wharekauri, Te Āti Awa), J.A. Lamb (Ngāti Mutunga), L.R. Tilley (Ngāi Tahu), J.N. Procter (Muaūpoko, Ngāi Tahu, Ngāti Apa), T.M. Wilson., H. Gabrielsen (Ngāti Tūwharetoa, Ngāti Whitikaupeka), W.J. Hopkins</i>
250	<b>Ko wai koe i te pūtaiao? (How do I remain indigenous/tūturu Māori (authentic) when working in science?)</b> <i>K. Mauriohoho, B. Smith, H. Gabrielsen, S. Tapuke, K. Tapuke, D. Hikuroa, J. Lindsay</i>
656	<b>Personal reflections on interactions with indigenous knowledge holders during an eruption episode of Mauna Loa, Hawaii, 2022</b> <i>S. Tapuke, K. Tapuke, J. Lindsay, D. Hikuroa, J. Muirhead</i>
778	<b>Matatuhi: Unlocking the forecasting potential of environmental tohu via ensemble systems models</b> <i>H. Gabrielsen, M. Whitehead, H. Whaanga, J. Procter</i>

<b>16:00 - 16:30</b>	<b>Coffee Break and Posters</b>
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<b>16:30 - 17:30</b>	<b>407. Evaluating secondary volcanic hazards: methodologies, recent advances and still open questions</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12 min)</i>
77	<b>Large-scale fluidisation of pyroclastic deposits by dilute pyroclastic currents</b> <i>K. Kelfoun, A. Proaño, T. Latchimy</i>
143	<b>Long-lasting consequences of aeolian remobilisation of ash: does the magma composition play a role?</b> <i>L. Dominguez, P. Forte, A. Fries, P.A. Jarvis, E. Rossi, L. Mingari, J. Merrison, J.J. Iversen, C. Bonadonna</i>
752	<b>Inclusion of volcanic sources in the procedures of the Central American Tsunami Advisory Center (CATAC)</b> <i>W. Strauch</i>
214	<b>Modeling and assessing the fire hazard from volcanic activity: The case of Stromboli Island</b> <i>R. Guardo, G. Bilotta, G. Ganci, F. Zuccarello, A. Cappello</i>
180	<b>The INGV Project PROMUD: looking for a possible monitoring protocol of mud volcanoes in anthropized areas</b> <i>P. Cusano, S. Petrosino, P. Bonfanti, P. Madonia, The INGV PROMUD-WP1 Working Group</i>

<b>17:30 - 18:30</b>	<b>Poster Session (Plaza San José)</b>
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<b>18:30 - 20:15</b>	<b>CERG-C workshop: Reflecting on past, present and future international collaborations on volcanic risk reduction</b>
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**Room Obispo**

<b>10:30 - 11:30</b>	<b>416. Volcano databases: integrating citizen science with observatory needs and powering communication and education strategies</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12 + 3 min)</i>
48	<b>Using photographs and video from local observers to inform GVP's Bulletin of the Global Volcanism Network</b> <i>K. Bennis, E. Venzke, B. Andrews</i>

78	<b>Utility of a new global database of subaerial erupted mass from 1980 to 2019 (EMaP_v_1)</b> <i>F. Galetto, M.E. Pritchard</i>
527	<b>Volcano Observations Thematic Core Service (EPOS-ERIC) supports open science by accessing to European volcanological databases</b> <i>L. Cacciola, A. Geyer, Y. Guehenneux, J.-C. Komorowski, E. Indovina, R. Juliusdottir, P. Labazuy, A. Lemarchand, R. Nave, G. Puglisi, I. Santangelo, J.-M. Saurel, D. Reitano, L. Spampinato, K. Vogfjörð</i>
569	<b>Infolabar-A database about debris flows and sediment-water mixtures</b> <i>L. Caballero, D. Sarocchi, F. Dioguardi, N. Ortiz-Guerrero, E. López, M.E. Ubach-Coatzl6, R. Bernabé Ricardo, N. Nedumpallile-Vas</i>

11:30 - 13:00		413. New methodologies for volcanic hazard and risk assessments
Abstract ID	<b>Format: Oral presentations (12 + 3 min)</b>	
229	<b>An adaptive algorithm for satellite data assimilation to simulate complex lava flow fields</b> <i>F. Zuccarello, F. Cannavò, G. Bilotta, A. Cappello, R. Guardo, G. Ganci</i>	
472	<b>Systemic impact assessment for complex volcanic eruption scenarios</b> <i>A.M. Weir, T.M. Wilson, N. McDonald, R. Fairclough, M.S. Bebbington, S.R. Mead, C. Campbell-Smart, T. Gordon, H.M. Craig, J.H. Williams, E. Coultas, T. Velvin, S. Gauden-Ing, K. Lawson, N. Bui, S. Mattea</i>	
461	<b>Propuesta metodológica para evaluar el riesgo volcánico a desastres por el cambio del uso de suelo, Volcán Colima, México</b> <i>C. Suarez-Plascencia, E. Trejo-Gómez, F.J. Núñez-Cornú</i>	
264	<b>Volcanic Risk Ranking for Ecuadorian volcanoes, with eruptions the last 10.000 years</b> <i>F. Naranjo, C. Frischknecht, C. Bonnadona</i>	
108	<b>Exposure-based risk assessment of tephra fall associated to eruptions at Misti volcano, Arequipa-Perú</b> <i>K. Cueva Sandoval, S. Biass, L. Dominguez, J. Mariño, C. Bonadonna</i>	
518	<b>A methodology to qualitative assess social and physical vulnerabilities at Planchón-Peteroa Volcano, Southern Andes, Chile</b> <i>A. Nieto-Torres, A. Esquivel-Cáceres, Y. Gómez-Leyton, I. Martínez-Valdés, Á. Aravena, P. Salazar-Reinoso, F. Aguilera-Barraza</i>	

13:00 - 14:00	<b>Lunch</b>	
14:00 - 14:30	<b>Poster Session (Plaza San José) &amp; Coffee</b>	

14:30 - 15:00		413. New methodologies for volcanic hazard and risk assessments
Abstract ID	<b>Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (5 min)</b>	
672	<b>Uso de volcanes análogos para el análisis de peligros: casos de estudio Volcán Melimoyu, zona austral de Chile</b> <i>L. Bono, V. Burgos, C. Perales, C. Jorquera</i>	
171	<b>⚡ Multi-purpose searches for analogue volcanoes using PyVOLCANs: preliminary findings at Volcán de Fuego (Guatemala)</b> <i>P. Tierz, R. Escobar-Wolf, A. Roca, R. Mérida, E. Spiller, R. Wolpert, A. Bell, A. Bain, M. Watson, A. Naismith, V. Christodoulou, J. Stevenson, S. Loughlin, E. Calder</i>	
29	<b>⚡ Utilización de PINNs en un modelo de advección-difusión para dispersión de ceniza volcánica</b> <i>Y. Gomez-Leyton, P. Salazar Reinoso</i>	
159	<b>⚡ Developing a national volcanic risk model framework for Aotearoa New Zealand: current capabilities and future ambitions</b> <i>J.L. Hayes, G.S. Leonard, T.M. Wilson, C. Magill, R.H. Fitzgerald, J.H. Williams, M. Bebbington, S. Mead, J. Lindsay</i>	

15:00 - 16:00		419. Volcanic emission impacts to societies, environments, and economies: From forecasting to informing resilience-building actions
Abstract ID	<b>Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (5 min); *Invited talk</b>	
169	<b>A global analysis of the risk of crops to tephra fallout</b> <i>S. Biass, N. Ligot, P. Delmelle</i>	
284	<b>Regulating Volcanic Risk: Lessons from Aotearoa New Zealand</b> <i>W.J. Hopkins, N. Evison, T. Collin</i>	
126	<b>Are we prepared? The role of legal frameworks in managing the impacts of volcanic emissions.</b> <i>H. Faulkner, J. Hopkins, T. Wilson</i>	
382	<b>*A hundred years of ships and eruptions in Patagonia: addressing the complex interplays between volcanic crises and nautical transport</b> <i>P.A. Salgado, G. Villarosa, D. Beigt, V. Outes, F. Baranzini, C. Stewart</i>	

16:00 - 16:30	<b>Coffee Break and Posters</b>	
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16:30 - 17:30		419. Volcanic emission impacts to societies, environments, and economies: From forecasting to informing resilience-building actions
Abstract ID	<b>Format: Oral presentations (12 + 3 min); ⚡ Lightning talks (5 min); *Invited talk</b>	
210	<b>*Rapid mapping of tephra fallout building damage: A machine learning approach</b> <i>E. Tennant, S.F. Jenkins, V. Miller, B. Wen, R. Robertson</i>	

163	<p>⚡ <b>Rapid Volcanic Ashfall Impact Assessment for the 2022 Hunga Eruption: a bespoke approach and lessons learned</b>  <i>A.M. Weir, J.H. Williams, T.M. Wilson, J. Hayes, C. Stewart, G. Leonard, C. Magill, S.F. Jenkins, S. Cronin, S. Williams, H.M. Craig, T. Kula, S. Faitotonu, B. Smallfield, R. Paterson-Lima, A. Pomonis, R. Gunasekera, J.E. Daniell, E. Coultas</i></p>
165	<p>⚡ <b>Understanding ashfall impacts and recovery from the 15 January 2022 eruption of Hunga Tonga-Hunga Ha'apai volcano, Kingdom of Tonga</b>  <i>H. Craig, J. H. Williams, C. Stewart, J. Hayes, T. Kula, R. Vaiomounga, P. Tukuafu, T. Wilson, S. Williams, G. Leonard, M. Manu, S. Faoliu, F. H. Latu'ila, A. M. Tupou, T. Tui'afitu, T. Ika, F. Auapaau, F. Scheele, A. Weir, K. Matahau</i></p>
101	<p>⚡ <b>Tephra fall impacts to buildings: The 2017-2018 Manaro Voui eruption, Ambae, Vanuatu</b>  <i>S.F. Jenkins, A. McSparran, T.M. Wilson, C. Stewart, G. Leonard, S. Cevuard, E. Garaebiti</i></p>
765	<p>⚡ <b>Erupción del volcán El Fuego Guatemala del 3 junio 2018: Gas y aerosoles detectados en Costa Rica y el Caribe</b>  <i>M. Martínez Cruz, J.P. Sibaja Brenes</i></p>
235	<p>⚡ <b>Quantifying the efficiency of tephra clean-up operations to mitigate roof collapse from the 2021 Tajogaite eruption (La Palma, Spain)</b>  <i>M.-P. Reyes-Hardy, S. Biass, L. Dominguez, L.S. Di Maio, C. Frischknecht, C. Bonadonna, N. Pérez</i></p>

**17:30 - 18:30** **Poster Session (Plaza San José)**

**Room Mesón del Obispo**

<b>11:00 - 13:00</b>	<b>203. "Fire up a mountain and nobody there to put it out" – Living with Volcanoes in Song, Story, Poetry, and Music</b>
Abstract ID	<i>Format: Oral presentations (12 min), *(14 min), ** (7 min), *** (20 min)</i>
202	<p><b>'Tall is her Body': A community-centred approach to volcanic hazard awareness film making in Dominica.</b>  <i>O. Graham, S. Edwards, L. Mani, D. James, S. Casimir, A. James</i></p>
269	<p><b>An Eruption of Creativity on a Small Island</b>  <i>H. Francis</i></p>
270	<p><b>Creative Arts for Therapy: Enduring Montserrat's Volcanic Crisis</b>  <i>G. Phillips, G. Shotte</i></p>
271	<p><b>The Alliouagana Singers: Singing the Life We Live</b>  <i>C. Riley, S. Adolphus, G. Shotte</i></p>
272	<p><b>Alliouagana Pearl – Poetry from Montserrat</b>  <i>M. Roach</i></p>
659	<p><b>Calypsos, Crisis, and Community Activism</b>  <i>M. 'Tajoe' Scott</i></p>
711	<p><b>*The cadence of a volcanic breath: parallels in choral compositions and petrologic investigations of Momotombo, Nicaragua</b>  <i>S. Tramontano, G. Lyons</i></p>
661	<p><b>***Volcanoes in Song, Story, Music, and Poetry, with Annesta Fergus's 'Legacies of Destruction: Growing and Preserving Culture in the Montserratian Diaspora'</b>  <i>J. Christie</i></p>
278	<p><b>**La Voz de Mamajuana y la Bitácora de Antonia: la novela gráfica como plataforma de comunicación sobre volcanes</b>  <i>N. Pardo, N. Palacios, L. Parra-Agudelo</i></p>

**13:00 - 14:00** **Lunch**

**14:00 - 14:30** **Poster Session (Plaza San José) & Coffee**

<b>14:30 - 15:30</b>	<b>205. Beyond hazard maps? Exploring methods, media and the map-making process to consider new opportunities in map making practices and their alignment with DRR</b>
Abstract ID	<i>Format: Oral presentations (15 min), *(7 min); Group discussion</i>
675	<p><b>Can map-making practices facilitate exchanges between scientific and non-scientific thinking and weave different realities of place together from local to landscape scales?</b>  <i>N. Stuart, E. Calder, R. Escobar Wolf, L. Mackenzie, J. Phillips, D. Sapalu, C. Sala Valdes, M. Watson</i></p>
485	<p><b>When volcanic hazard maps go online - opportunities to involve new and wider audiences</b>  <i>L.F. Patino Velasquez, J. Andres, N. McWilliam, K. Renner, K. Lorenz, S. Valdivia, N. Stuart, E. Calder, C. Wood, C. Laverde, M. Monsalve, D. Andrade, R. Calderón, A. Amigo, M. Johnson-Lynch, R. Robertson, E. Vougioukalakis, R. Salguero</i></p>
680	<p><b>*Cohabitando territorios: Cartografías Ancestrales y Resiliencia Comunitaria</b>  <i>A.B. Petzey Quijejú, D. Quijejú Mendoza, Concepción Xicay, Abuelos y Abuelas Tz'utujiles de Pnabaj, M. Choipen, Mujeres y hombres de la organización comunitaria ANADESA, D. A. Reanda Sapalú, E. Calder, M.T. Armijos Burneo, C. Sala Valdés, J. Phillips</i></p>
	<b>Group discussion (20 min)</b>

**16:00 - 16:30** **Coffee Break and Posters**

16:30 - 18:00		202. Eruption! The (Re)mediation of Volcanoes in Film, Media and Popular Culture
Abstract ID	<i>Format: Oral presentations (12 + 3 min); Group discussion</i>	
400	<b>A love song and a requiem. Reframing the work of Katia and Maurice Krafft as sensory ethnography</b> <i>P. Ascencio Fuentes</i>	
422	<b>Seeing, writing, and representing people and communities' relationship with volcanoes: encounters and divergences between anthropology and filmmaking</b> <i>A. Colom</i>	
613	<b>La (re)mediación audiovisual del desastre en El valle sin sombras (Ruben Mendoza, 2015)</b> <i>C. Gleghorn</i>	
635	<b>Film making: letting the essence emerge</b> <i>M. Prince</i>	
706	<b>The making of "Cordillera de Fuego": negotiating indigenous engagements, Eurocentric knowledges and (inter)disciplinary epistemologies</b> <i>R. Ribeiro, J. Cupples, C. Gleghorn, K. Glynn</i>	
<b>Group discussion (15 min)</b>		

17:30 - 18:30		Poster Session (Plaza San José)
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Room Doña Luisa	
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10:30 - 11:30		309. Facts, Faith and Function: Exploring the role of spirituality and faith-based organisations in volcanic risk communication and management
	<i>Format: Round table discussion</i>	

12:00 - 13:00		102. Suelos volcánicos: desafíos para su protección y conservación sustentable
	<i>Format: Round table discussion</i>	
	Panelists: Silvia Ramos, Carlos Omar Cruz Gaistardo	

17:30 - 18:30		Poster session- Plaza San José
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Abstract ID	105. Geodiversity in volcanic areas – New approaches to define, measure and promote volcano diversity and their implication for geohazard resilience and geocultural aspects
39	<b>Geodiversidad en complejo volcánico Rincón de la Vieja y su potencial como Geoparque</b> <i>S. Guillen Rivera, A. Quesada Román, G. Alvarado Induni</i>
305	<b>Life in Lavas / La vida en lava</b> <i>M. del P. Ortega Larrocea, M.F. Martínez-Báez Téllez, M.N. Guilbaud, B. van Wyk de Vries</i>
562	<b>PATRIMONIO GEOLÓGICO EN TORNO A LA CIUDAD DE AREQUIPA: INVENTARIO DE GEOSITIOS, RESULTADOS Y PERSPECTIVAS</b> <i>A. Ancalle, J. Mariño, C. Arias, K. Cueva, J. Cuno</i>
564	<b>GESTIÓN DEL PATRIMONIO GEOLÓGICO EN ZONAS VOLCÁNICAS ACTIVAS PARA EL DESARROLLO DEL GEOTURISMO</b> <i>C. Arias Salazar, B. van Wyk de Vries, J. Mariño Salazar, E. Espinoza</i>
582	<b>VOLTURMAC: Strengthening volcano tourism in Macaronesia</b> <i>V. Leal, J. Dóniz-Páez, N. M. Pérez, J. Barrancos, P. Hernández, D. Afonso Falcón, H. de Los Ríos Días, D. D'Nardo, R. García-Hernández, V. Ortega, Y. Pérez, J. C. Reyes, A. Correia, V. Alfama, A. Delgado</i>
649	<b>Geodiversity at the Robinson Crusoe Island, Pacific SW: input for a sustainable development based on tourism</b> <i>F. Vidal, L.E. Lara, C. Soto</i>
674	<b>Quebrada Añashuayco nominado como uno de los 100 primeros geositios mundiales de la Unión Internacional de Ciencias Geológicas</b> <i>N. Manrique, R. Aguilar, C. Palacio, B. Van Wyk de Vries, J. Mariño, B. Zavala, C. Arias, J. Morin, D. Arteaga, K. Llerena</i>

Abstract ID	106. Taking Information Exchange to the Next Level: Using Park Interpretation Methods to Enhance Science Communication
124	<b>Park interpretation contributes powerful strategies for coordinated volcano awareness campaigns.</b> <i>C. Driedger, T. Cullings, P. Wold</i>
459	<b>Local Knowledge and Information Provision: Enhancing the Role of National Park Rangers in Icelandic Hazard Preparedness</b> <i>P. Vesaluoma</i>

<i>Abstract ID</i>	<b>107. Whose Mountain is it Anyway? Volcanoes, Knowledge, and Tourism</b>
380	<b>Tourism attitude and information on volcanic risk at Stromboli Island (Italy)</b> <i>R. Nave, A. Miso, T. Ricci, G. Prati</i>

<i>Abstract ID</i>	<b>205. Beyond hazard maps? Exploring methods, media and the map-making process to consider new opportunities in map making practices and their alignment with DRR</b>
84	<b>The Volcanic Hazard Maps Database Map Menu and Map Builder: Tools for Community Engagement in the Map-Making Process</b> <i>S. Ogburn, D. Charlton, H. Wright, J. Lindsay, E. Calder, M. A. Clive, D. Bertin, B. Steinke</i>
292	<b>Safety in sight "Hazard Map"</b> <i>P. Taylor</i>
361	<b>High-resolution seismic microzonification in urban areas of the Canary Islands</b> <i>D.M. van Dorth, J. B. Martínez, I. Cabrera-Pérez, L. D'Auría, R. García-Hernández, G. D. Padilla Hernández, A. Palau Erena, M. Przeor, V. Ortega Ramos, N. Pérez Rodríguez</i>
292	<b>El arte del SIG: explorando la intersección entre los mapas y el arte</b> <i>N. Mendoza</i>

<i>Abstract ID</i>	<b>303. The Indigenous voice in volcanology: seeking pathways towards co-production of knowledge</b>
732	<b>The science in the stories: reconstituting the geology of Hawaiian volcanoes from oral tradition</b> <i>T. Shea, D. A. Swanson, A. Tonato, D. T. Downs</i>

<i>Abstract ID</i>	<b>306. Communities on the move: understanding the resettlement processes after a disaster</b>
397	<b>Conservando nuestras raíces en nuevas tierras, reivindicando nuestra cultura (Ixqii' rmi'aal ruch'leew - Mujeres hijas de la tierra)</b> <i>A.J. Cabrera Pacheco, D.A. Reanda Sapalú</i>

<i>Abstract ID</i>	<b>308. Imaginaries, perceptions and narratives of living in volcanic environments</b>
6	<b>Using Ethnography to Describe the Cultural Importance of Volcán de Colima within the state of Colima, Mexico</b> <i>L. Xochitl Marshall, M. Sandra Marshall, N. Varley</i>
347	<b>"El Fantasma de Armero" un reto en la gestión del riesgo volcánico del volcán Nevado del Ruiz, Colombia</b> <i>G. P. Cortés Jiménez, A. Velásquez Gaviria</i>
542	<b>Vesuvius: the Model Volcano?</b> <i>D. Pyle</i>
768	<b>El Geopedregal, un modelo de educación en Ciencias de la Tierra sobre conservación del Geopatrimonio.</b> <i>M. del Pilar Ortega Larrocea</i>

<i>Abstract ID</i>	<b>311. Making the magic happen: methods and case studies for interdisciplinary knowledge exchange in volcanic risk</b>
285	<b>Training programs to Improve Volcanic Disaster Preparedness Capacity Across Countries and Professions</b> <i>H. Yokoyama, M. Yoshimoto</i>
605	<b>Creative approaches in liminal spaces: learning from recent interdisciplinary ventures</b> <i>A. Hicks, C. Reed</i>
606	<b>Cordillera de Fuego film: a collective effort centering Guatemalan Maya Tz'utujil and Kaqchikel communities in an active volcanic ...</b> <i>E. Calder, A. Petzey, J. Cupples, J. Bustamante, M. Kenefic, L. Pineda, M. M. Coroy, A. Colom, C. Chun, D. Sapulu, C. Gleghorn A. Roca, R. Rebeiro, A. Cabrera Pacheco, R. Escobar Wolf and T. Armijos</i>
735	<b>Bridging the Volcanic Divide: Fostering Connection and Preparedness through Art in Montserrat's Youth</b> <i>T. Williams, K. Pascal, S. Payne, D. Sweeney, J. Barclay, D. Pyle</i>
55	<b>Applying external experience to observatory best practices: Prioritizing interpersonal skill development for successful collaboration</b> <i>H. Weiss-Racine</i>

<i>Abstract ID</i>	<b>314. La educación en ambientes volcánicos y riesgos, una necesidad impostergable</b>
337	<b>Fair of Science and Volcanoes: an opportunity to foster interest and vocation for science, arts and volcanoes in the school</b> <i>P.A. Hernández, F. Rodríguez, R. García, G. Padilla, V. Tai Albertos, V. Ortega Ramos, A. García Regalado, N. M. Pérez</i>
454	<b>Recreación de una hipotética erupción del Volcán Xitle, en un contexto contemporáneo; escenarios y consecuencias</b> <i>T. González Morán, G. De la Puente Flores</i>

<i>Abstract ID</i>	<b>405. Deciphering magmatic processes and eruptive triggering at open conduit volcanoes: multidisciplinary approaches for hazard assessment and risk mitigation</b>
724	<b>Thermal and seismic analysis of the recent activity of Popocatepetl volcano, Mexico</b>

724	<i>D. V. Bracamontes, I. López Vega, J. Quiroz Rodríguez, R. Arámbula Mendoza, P. Alonso Rivera, M. Angel Saldívar, D. Vázquez, E. Cárdenas Sánchez, M. González Amezcua, C. A. García Sandoval</i>
131	<b>New insights on the highly explosive Petrazza eruptive activity at Stromboli (77-75 ka)</b> <i>E. Nicotra, F. Lucchi, M. Minniti, R. Sulpizio, C. A. Tranne</i>
307	<b>Interpreting open conduit magma dynamics at Villarrica volcano using citizen-led petrological time series of pyroclastic products</b> <i>J. E. Romero, F. Cáceres, A. Guevara, E. Morgado, M. Polacci, F. Vergara-Pinto, and C. Contreras</i>
319	<b>Hazard from ballistics during the 2020-22 paroxysmal eruptions at Mount Etna</b> <i>G. Costa, L. Mereu, M. Prestifilippo, S. Scollo, and M. Viccaro</i>
323	<b>Multi-disciplinary reconstruction of magma dynamics during the 2020-22 paroxysmal sequence at Mt. Etna volcano</b> <i>C. Andrea, C. Massimiliano, G. Salvatore, G. Marisa, I. Adriana, M. Vittorio, M. Viccaro</i>
685	<b>ESTUDIO PETROGRÁFICO DE LA "IGNIMBRITA AEROPUERTO DE AREQUIPA" DEL PLEISTOCENO (PERÚ)</b> <i>J. Mariño, A. Fernández, M. Gómez y J. Solís</i>
655	<b>Explosive activity of Reventador: seismic and infrasound insights of a persistent behavior of a long-term eruptive volcano</b> <i>M.C. Ruiz, S. Hernandez, G. Viracucha, S. Hidrovo, Y. Riofrío</i>
658	<b>Waxing and Waning of Explosive Activity During Fuego's Eruptive Cycles</b> <i>K. Sivaraj, G.P. Waite</i>
757	<b>La vigilancia infrarroja como herramienta dentro de la evaluación de amenazas volcánicas: Proceso eruptivo del volcán Cotopaxi...</b> <i>F. Naranjo, M Almeida, S. Vallejo, P. Ramón, D. Pacheco</i>
761	<b>Magma pressurization in conduit before Vulcanian eruptions at Sakurajima volcano inferred from conduit flow modeling</b> <i>T. Kozono, T. Nishimura, A. Matsumoto, M. Nakagawa, M. Iguchi, and T. Miwa</i>
62	<b>Tracking lava lake elevation in real time with continuous laser rangefinders</b> <i>F. Younger, M. Patrick, W. Tollett</i>
73	<b>The February-March 2021 lava fountains events of Mt. Etna South-East crater: insights from clinopyroxenes.</b> <i>C.M. Petrone, R. A. Corsaro</i>
102	<b>Petrological analysis of the recent explosive phases (2019-2022) of Sangay volcano, Ecuador</b> <i>N. Vizuet, P. Samaniego, B. Bernard, J-L. Devidal, S. Hidalgo</i>
149	<b>Geochemical and textural investigations of pyroclastic products from the June 3rd 2018 eruption of Volcán de Fuego, Guatemala</b> <i>E.L. Fancher, A. Germa, S. J. Charbonnier</i>
192	<b>Magma Mixing triggers eruptions at Volcán de Pacaya (Guatemala)?</b> <i>L. Hernandez, E. Mullins, G. Chigna, M. Barton, D. Kelley</i>
322	<b>Triggering and emplacement mechanisms of Pyroclastic Density Currents in basic volcanic systems</b> <i>C. Giorgio, B. Boris, V. Marco</i>
364	<b>Amphibole and clinopyroxene barometries of the Petrazza pyroclastics, PaleoStromboli I (85-75 ka), reveals the magma plumbing ...</b> <i>M. Minniti, F. Lucchi, E. Nicotra, F. Ridolfi, R. Sulpizio, C. Antonio Tranne</i>
467	<b>Thermal emissions at open-vent volcanoes: results from the MIROVA database</b> <i>D. Coppola, M. Laiolo, F. Massimetti, A. Campus, S. Aveni</i>
483	<b>Modelling diffuse degassing at Stromboli (Italy)</b> <i>M. Todesco, S. Inguaggiato, C. Montagna, G. Tamburello, A. Garcia, L. Sandri</i>
484	<b>Tracking of eruptive activity changes at Multi-Vent volcanoes through joint seismo-acoustic analysis: Mt. Etna, Italy case study.</b> <i>L. Zuccarello, S. De Angelis, G. Saccorotti, J. M. Ibanez, C. J. Bean, S. Rapisarda, A. Rubonello, L. Scuderi</i>
497	<b>Translating magma mixing dynamics to ground deformation patterns: Utilising GALES to simulate magma-rock interaction ...</b> <i>O. McCluskey, P. Papale, C. Montagna, D. Garg, C. Pagli</i>
664	<b>Detecting and characterizing tremor emission episodes during the 2022-2023 Cotopaxi eruption using network and array methods</b> <i>S. Hernandez, A. F. Bell, M. Ruiz, P. Palacios</i>
290	<b>VULCANIAN ERUPTIONS AT OPEN CONDUIT BASALTIC VOLCANOES. ARE THEY POSSIBLE?</b> <i>G. Giordano, A. Frontoni, T. O. Grillo, R. Russo, G. Carrasco-Nunez, G. De Astis, A. Vona</i>

<i>Abstract ID</i>	<b>408. From ground to space: Observations and modelling of volcanic gas and ash emissions for eruption forecasting and hazard and environmental impact assessment</b>
51	<b>Portable and low cost TIR ground based system for volcanic emission monitoring. Measurements strategy and error assessment.</b> <i>S. Corradini, L. Guerrieri, L. Merucci, D. Stelitano</i>
72	<b>The VULCAIN CubeSat mission for studying volcanoes and active thermal areas</b> <i>V. Romaniello, M. F. Buongiorno, M. R. Lavagna, D. Labate, S. V. Tudor, A. Masini, P. De Carlo, M. Silvestri, C. Pirat</i>
122	<b>Discrete Ash clouds from Sangay Volcano – Ecuador 2015-2020 eruption period, ash volume estimations using VAAC data base</b> <i>A.G. Ruiz, I. Flores, F. Vasconez, P. Chavez</i>
132	<b>Satellite Acquisition System for volcanoes monitoring at INGV Rome headquarter</b> <i>D. Stelitano, L. Merucci, S. Corradini, P. Ficeli, F. Zanolin, L. Guerrieri</i>
153	<b>Late Pleistocene explosive volcanism at Kilauea: Mapping, characterizing, and modelling the distribution of Pahala Ash</b> <i>A. Tonato, D.T. Downs, N.G. Pasqualon, T. Shea</i>
170	<b>Quantifying primary sulphate aerosol formation with direct line-of-sight OP-FTIR measurements</b> <i>J-F. Smekens, J.A. Mather, M.R. Burton, M. Varnam, M.A. Pfeffer</i>
191	<b>Rapid mapping by multi-sensor UAV surveying for monitoring 2021-2023 volcanic unrest at Vulcano Island</b> <i>M. Marsella, M. Coltelli, L. Lodato, P. D'Aranno, M. Cagnizi, F. Rossi</i>
196	<b>Insights into magma dynamics at Etna (Sicily) from SO<sub>2</sub> and HCl flux during the 2008-09 eruption</b> <i>A. La Spina, M. Burton, G. Salerno and T. Caltabiano</i>
209	<b>The role of gas monitoring at Volcán de Colima, Mexico</b> <i>N. Varley</i>
220	<b>Improved global monitoring of volcanic plumes combining LEO and GEO retrievals in support of volcanic observatories and aviation</b> <i>H. Brenot, N. Theys, J. van Gent, M. Friedrich, P. de Buyl, L. Clarisse, N. Clerboux, and M. Van Roozendael</i>



231	<b>Assessing tephra fall hazard from Etna paroxysms: modelling their temporal occurrence and ash dispersion based on an integrated..</b> <i>L. Sandri, L. Mereu, A. Garcia, M. Prestifilippo, M. Stocchi, S. Scollo</i>
273	<b>Processing software of SO2 emissions measured by UV cameras/ Software de procesamiento de emisiones de SO2 medidas con...</b> <i>M.M. Friedrich, H. Brenot, N. Theys, A. Merlaud, C. Hermans, C. Fayt, M. Van Roozendael</i>
546	<b>Multiparametric monitoring of Cotopaxi volcano during the 2022–2023 eruption: the importance of SO2 degassing measurements</b> <i>S. Hidalgo, M. Almeida, F. J. Vasconez, J. Battaglia, S. Hernandez, A. Córdova, S. Valade, B. Bernard, A. Vásconez Müller, S. Areallano, D. Pacheco, D. Sierra</i>
553	<b>Tracking the activity of Etna summit craters area by multidisciplinary approach</b> <i>A. La Spina, P. Bonfanti, C. Corradino, C. Del Negro, G. Di Grazia, G. Salerno, M. Sciotto, F. Zuccarello</i>
626	<b>Forecasting volcanic activity over the next decade: The plans for rapid-revisit orbital thermal infrared (TIR) data</b> <i>M.S. Ramsey, J. Thompson, C. Corradino, M. Watson, A. Harris, D. Williams</i>
470	<b>Opening a skylight in steady open-vent outgassing at Mt. Etna</b> <i>G. Salerno, G. Di Grazia, A. La Spina, M. Sciotto, L. Spampinato</i>
474	<b>Understanding and monitoring volcanic emissions with infrasound</b> <i>S. De Angelis, L. Zuccarello, S. Scollo, L. Mereu</i>
494	<b>Observing volcanic aerosol optical properties with portable MicroTops-II sun-photometers</b> <i>P. Sellitto, G. Salerno, A. Di Sarra, A. La Spina, L. Spampinato</i>

Abstract ID	413. New methodologies for volcanic hazard and risk assessments
148	<b>Understanding pyroclastic density current timescales and evacuation timescales at Volcán Fuego and Volcán Santiaguito</b> <i>A. Daniels, A. Naismith, P. Rowley, M. Watson</i>
161	<b>Probabilistic volcanic hazard and impact assessment for the Auckland Volcanic Field, Aotearoa New Zealand</b> <i>J.H. Williams, T.M. Wilson, J.L. Hayes, G.S. Leonard, A. Weir, C. Magill, M. Bebbington, R.H. Fitzgerald, S. Mead, J. Lindsay</i>
167	<b>Quantifying Volcanic Hazards: A Probabilistic Analysis of the Tacaná Volcanic Complex</b> <i>A.T. Mendoza-Rosas, S. De la Cruz-Reyna, J.L. Macías</i>
212	<b>Multi-component exposure and characteristics of densely populated neighbourhoods facing persistent volcanic threats: the Semeru</b> <i>J-C. Thouret, M. Taillandier, E. Wavelet, N. Azzaoui, O. Santoni, B. Tjahjono</i>
215	<b>Improving our ability to forecast volcanic ballistic projectile hazard through statistical metamodelling</b> <i>R. Fitzgerald, M. Bebbington, S. Mead, J. Procter</i>
349	<b>Using empirical damage data to develop lava flow fragility functions for the built environment</b> <i>E.S. Meredith, S.F. Jenkins, J.L. Hayes, D. Lallemand, N.I. Deligne, C.J. Hao Denny, S. Melettidis, A. Felpeto</i>
369	<b>Ground displacement monitoring of volcanoes via space-borne and airborne DInSAR systems to support Civil Protection activities</b> <i>F. Monterroso, P. Berardino, M. Bonano, S. Buonanno, F. Casamento, F. Cotugno, C. De Luca, A. Di Vincenzo, C. Esposito, M. Franzese, A. Fusco, R. Lanari, M. Manunta, A. Natale, G. Onorato, S. Perna, F. Poggi, Y. Roa, P. Striano, M. Yasir, G. Zeni, I. Zinno, F. Casu</i>
378	<b>Using recent activity to reconstruct eruptive history and develop hazard scenarios at Sangay volcano, Ecuador</b> <i>B. Bernard, P. Samaniego, A. Tadini, F. J. Vasconez, S. Hidalgo</i>
464	<b>Evolution of the Shannon Entropy of 2021 Tajogaite eruption</b> <i>P. Rey-Devesa, J. Carthy, M. Titos, J. Prudencio, L. D'Auria, J. Ibáñez, C. Benítez</i>
710	<b>Integración de la geomática en el monitoreo de peligros volcánicos: Complejo de Domos del Volcán Santiaguito, Guatemala</b> <i>K. Chun Quinillo, G. Chigna Marroquín, J. Cornejo Alvarado</i>
71	<b>Uso de la metodología ADVISE en el contexto chileno para la gestión y reducción del riesgo por modelamientos de peligro por...</b> <i>R.M. Pinto, V.A. Toloza</i>
127	<b>How well do concentric radii approximate population exposure to volcanic hazards?</b> <i>S. Biass, S.F. Jenkins, J. L. Hayes, G. T. Williams, E. S. Meredith, E. Tennant, Q. Yang, G. A. Lerner, V. Burgos, M. Syarifuddin, A. Verolino</i>
166	<b>A new probabilistic ash hazard and risk model for Aotearoa New Zealand</b> <i>C. Magill, J. Hayes, T. Wilson, H. Craig, J. Williams, M. Bebbington, N. Horspool, N. Griffith and T. Beale</i>
175	<b>Deep Approximations for Continuous Volcano-Seismic Event Recognition using Dilated Recurrent Neural Networks</b> <i>M. Titos, J. Carthy, P. Rey-Devesa, C. Benitez, J. Ibáñez</i>
199	<b>Modelling disruption to infrastructure from volcanic hazards</b> <i>G. Lerner, S. Jenkins, J. Hayes, M. Joffrain</i>
421	<b>Surface deformation in the Alfredo Mainieri Protti Geothermal Field, Guanacaste, Costa Rica</b> <i>A. Pacheco, P. Hidalgo, C. Araya</i>
574	<b>Distributed acoustic sensing for seismic events monitoring using machine learning</b> <i>L. G. Martinez, C. Benítez Ortúzar, S. Mota Fernández, P. Sarathy Dey, I. Fakhruzi, J. Carthy</i>
578	<b>Correlating Ground Displacement and Eruptive Activity at Rincón de la Vieja Volcano</b> <i>J. Nimblett, M. Maldonado, L. Watkins, M. C. Araya, P. J. Hidalgo, H. Bakkar Hindeleh, J. Pacheco Alvarado</i>
648	<b>Ecological vulnerability to volcanic hazards in the South Sandwich Islands evaluated using scenario-based probabilistic multi-hazard</b> <i>C. Trimmer, A. Cotterill, E.J. Nicholson</i>
413	<b>Monitoring and Quick Reconnaissance of Physical-Chemical Characteristics at Hazardous Volcanic Lakes using Autonomous Vehicles</b> <i>C.J. Ramirez Umaña, D. McFarlane, Y. Alpizar Segura, G. Van Rentergem, D. Arroyo Alpizar</i>

Abstract ID	416. Volcano databases: integrating citizen science with observatory needs and powering communication and education
157	<b>Leveraging citizen science for eruption observations via old and new pathways</b> <i>C. Cameron, K. Wallace</i>
329	<b>Improving community volcanic risk awareness through Citizen Science: INGV- Osservatorio Vesuviano Web Form experience.</b> <i>R. Nappi, R. Nave, G. Scarpatò</i>



Abstract ID	419. Volcanic emission impacts to societies, environments, and economies: From forecasting to resilience-building actions
609	<b>Is it possible to identify signs of large volcanic eruptions in tree ring perturbations in southern Mexico?</b> <i>N. Guadarrama, O. Franco Ramos, J. Cerano Paredes, L. Capra</i>
673	<b>Exploring consequences of gas emissions from future eruptions in the Auckland Volcanic Field, New Zealand, for health and the...</b> <i>S. Brody-Heine, M. Katurji, C. Stewart, T. Wilson, E. R. Smid, R. Trancoso</i>
462	<b>Assessment of building damage from tephra fall during the 2020-21 eruption of La Soufriere volcano</b> <i>V. Miller, E. Tennant, S. F. Jenkins, M. Johnson, C. Magill, T. Wilson</i>
419	<b>The recent Nyiragongo eruption and its environmental impact: ash fallout and contamination of drinking water</b> <i>S. Calabrese, P. Habakaramo Macumu, S. Bellomo, G. Boudoire, F. Brugnone, L. Brusca, W. D'Alessandro, M. Gouhier, S. Lentini, L. Li Vigni, L. Randazzo, D. Tedesco</i>

Abstract ID	423. Long-term engagement between civil authorities and volcano observatories: opportunities and lessons learnt
54	<b>Plinian eruption simulation during 2023 of the Volcán de Colima, Mexico.</b> <i>R. Arámbula Mendoza, E. González Sánchez, C. Uribe Cosío, N. Varley, T. Domínguez Reyes, M. Bretón, R. de Jesús García Flores, H. Santiago Jiménez</i>
771	<b>Acciones del cuerpo de bomberos del municipio de Manizales en la gestión del riesgo del volcán Nevado del Ruiz, Colombia</b> <i>J. I. Quintero Jaramillo</i>

Abstract ID	424. Scientific -operational interface in volcanic crisis management: integrating national and international contributions
59	<b>Developing Effective Communication Practices for the International Community of Volcano Observatories</b> <i>W.K. Stovall, B. Bartel, N. Fournier, M. Calvache, P. Forte, J. Lowenstern, L. Sandri, A. Amigo, M.A. Contreras Vargas</i>
570	<b>Towards a European Volcano Observatories (EVO) Network: why it is needed and steps for its implementation</b> <i>S. Barsoiti, G. Salerno, E. de Zeeuw - van Dalzen, J. Pacheco, A. Felpeto, J-C Komorowski, S. Loughlin, C. Vye-Brown, R. Carmo, G. Vougioukalakis, K. Vogfjörd, B. Arna Ólafóttir, L. Ottemöller, M. Paratore, J. De Laat</i>
85	<b>Global Eruption Event Chronologies: A Call for Community Discussion</b> <i>S. Ogburn, H. Wright, S. Sennert, Z. Hastings, J. Marlow, E. Venzk, B. Andrews, K. Bennis, G. Mayberry</i>

Abstract ID	426. The role of the non-governmental associations and organizations in the reduction of volcanic risk
394	<b>Climate Change Impacts on Volcanic Hazards</b> <i>L.J. Bowman, H.D. Stenner, K.M. Nelson, M.A. Beroya-Eitner</i>
440	<b>International Field Volcanology Course in Colombia: seven years of history</b> <i>H. Murcia, L. Sánchez-Torres, L.A. Botero-Gómez, S. Osorio-Ocampo</i>
515	<b>VolcanoStories: An ongoing open-access educational resource for holistic public understanding of volcanic activity in the Canary...</b> <i>S. Backhouse, B. Ireland, A. W. Jones, F. Castelló, R. Rice, N. Puche, S. Cáceres-Leal</i>
491	<b>Oportunidades de formación y capacitación en volcanología para estudiantes y jóvenes profesionales de Latinoamérica: ALVO</b> <i>D. Bertin, M. Jácome Paz, P. Forte, L. Rodríguez, H. Delgado-Granados</i>
694	<b>Curso "Comunicar sobre Volcanes" del Instituto de Geofísica. UNAM, México.</b> <i>M.P. Jácome Paz, R. Campion, L. Caballero, C.N. Menéndez Gudiel, L.M. Cortina Urrutia, M.G. Torres, C. Armendáriz</i>
705	<b>El rol del Instituto Milenio de Investigación en Riesgo Volcánico – Kkelar Volcanes en la reducción del riesgo volcánico en Chile</b> <i>F. Aguilera</i>
722	<b>The Latin American Association of Volcanology (ALVO): its history, its present and what we offer</b> <i>L.A. Rodríguez, P. Forte, D. Bertin, M.P. Jácome Paz, H. Delgado Granados, J.G. Viramonte, J.L. Palma, M. Agosto</i>

Abstract ID	427. Stakeholder needs: Communication for decision-making during crises
57	<b>The development of the new Daily Volcanic Activity Report: an update and call for community input and discussion</b> <i>S. Sennert, S. Ogburn, H. Wright, G. Mayberry, Z. Hastings, J. Marlow, J. Lowenstern, B. Andrews, K. Bennis, E. Venzke</i>
181	<b>Understanding rhythms: The role of social and volcanic temporalities in risk communication</b> <i>F. Vergara-Pinto, N. O'Grady, A. Fredriksen, J.E. Romero</i>
222	<b>KAIROS AI-digital solution for predicting adverse sulphur clouds impacting airspace operations</b> <i>H. Brenot, A. Jardines, J. García-Heras Carretero, M. Piot, N. Theys, I. Martínez, N. Manzano, M. Soler, M. Van Roozendaal</i>
300	<b>Comparación de las escalas temporales de erupción y evacuación en el Volcán de Fuego (Guatemala) para una mejor comprensión..</b> <i>A. Naismith, T. Armijos, J. Phillips, J. Barclay, I.M. Watson, W. Chigna, G. Chigna</i>

Abstract ID	428. Un pilar prioritario en la gestión del riesgo - la comunicación
759	<b>Simulacro por Erupción Volcánica - Urbinas 2023</b> <i>V. Tito</i>

Abstract ID	429. "Can everyone understand us?": Communicating risk to vulnerable populations in volcanic areas
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600	<b>Improving risk communication using VolFilms videos and photo collection resources provided by the Smithsonian's Global...</b> <i>E. Venzke, B. Andrews, J.B. Krippner, S. Brown</i>
708	<b>The eruption of the Tungurahua volcano (1999-2016), Ecuador: Communication and Community-based Monitoring Network.</b> <i>P. Ramón, P. Mothes, S. Vallejo, H. Yepes</i>

Abstract ID	430. Communication is tuff: Conveying challenging topics in volcanology
507	<b>Scientists as Story-tellers: the explanatory power of stories told about volcanic crises</b> <i>J. Barclay, R. Robertson, T. Armijos</i>
633	<b>Communicating low-probability, high-consequence volcano hazards by comparing relative eruptive histories to support community...</b> <i>J. Wilson</i>
248	<b>Let us know! Have we captured the most important considerations for communicating hazard and uncertainty on maps?</b> <i>J. Lindsay, E. Calder, S. Ogburn, H. Wright, D. Bertin, D. Charlton, B. Steinke</i>

Last update: 05/02/24

## Cities on Volcanoes 12 Program



Themes	1. Volcanoes and sustainable development	2. Volcanoes, the humanities and creative Arts	3. Volcanoes and their social, cultural, and political context	4. From volcano monitoring and hazard assessment to risk management
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Friday, February 16

## Room Landivar

08:30 - 10:00	405. Deciphering magmatic processes and eruptive triggering at open conduit volcanoes: multidisciplinary approaches for hazard assessment and risk mitigation
Abstract ID	<i>Format: Oral presentations (10 + 2 min)</i>
95	<b>Open-vent volcanoes fuelled by gas fluxing and intrusive magmas</b> <i>M. Edmonds, E. Nicholson, K. Cashman</i>
321	<b>Space-time evolution of the Etna volcano plumbing system during the last decade</b> <i>M. Giuffrida, M. Cardone, F. Zuccarello, M. Viccaro</i>
552	<b>Monitorización en tiempo casi real de la actividad explosiva mediante señales sísmicas e imágenes visibles: un estudio de caso del volcán Sabancaya, Perú</b> <i>R. Centeno, V. Gómez, I. Lazarte, E. Mayhua, J. Vilca, S. Osoros</i>
333	<b>Deciphering magma dynamics controlling the 2020-22 lava fountain sequence at Mount Etna volcano using tilt deformation and volcanic tremor analysis</b> <i>M. Cardone, A. Cannata, S. Gambino, A. Iozzia, V. Minio, M. Viccaro</i>
331	<b>Lava dome cycles at Popocatepetl: insights into shallow magma dynamics from multiparametric satellite datasets</b> <i>S. Valade, D. Coppola, R. Champion, A. Ley, T. Boulesteix, N. Taquet, D. Legrand, M. Laiolo, T. R. Walter, S. De la Cruz-Reyna</i>
419	<b>Ten years (2013-2023) quantification of satellite-derived heat flux from multiple craters at the open-conduit Stromboli volcano</b> <i>F. Massimetti, D. Coppola, M. Laiolo, A. Campus, S. Aveni</i>
61	<b>Towards real-time lava effusion rate estimates with video-lapse cameras: an example from the 2022 Mauna Loa eruption</b> <i>M. Patrick, H. Dietterich, D. Hyman</i>

10:00 - 10:30

Coffee Break

10:30 - 11:30	405. Deciphering magmatic processes and eruptive triggering at open conduit volcanoes: multidisciplinary approaches for hazard assessment and risk mitigation
Abstract ID	<i>Format: Oral presentations (10 + 2 min)</i>
226	<b>Degassing dynamics of major explosions at Stromboli</b> <i>C. D'Orlando, S. Colucci, C. Paola Montagna, P. Del Carlo, A. La Spina, F. Brogi, I. Buisman</i>
469	<b>Improved understanding of eruptive triggering at open conduit volcanoes using continuous seismic recordings and complementary data</b> <i>C. Caudron, T. Girona, D. Dempsey, A. Ardid, A. Yates, T. Lecocq</i>
193	<b>Big or small? New constraints on explosive activity at Santiaguito, Guatemala</b> <i>Y. Lavallée, S. De Angelis, A. Rietbrock, O.D. Lamb, A.J. Hornby, P.A. Wallace, W. Carter, A. Rohnacher, E. Gottschämmer, A. Lamur, J.E. Kendrick, J. Johnson, B. Andrews, B.M. Kennedy, E. Rhodes, C. Cimorelli, F.B. Wadsworth, D.B. Dingwell, G. Chigna</i>
666	<b>Forecasting paroxysmal eruptions at Volcan de Fuego, Guatemala, using high spatial resolution observations of crater morphology</b> <i>M. Watson, A. Naismith, G. Chigna, A. Roca</i>
504	<b>Using geophysical monitoring data and eruption chronologies to illuminate conduit processes during paroxysms at Volcán de Fuego, Guatemala</b> <i>A. Bain, A. Bell, A.E. Roca Palma, S. De Angelis, E. Calder, R. Escobar Wolf, M. Watson</i>

11:30 - 13:00

408. From ground to space: Observations and modelling of volcanic gas and ash emissions for eruption forecasting and hazard and environmental impact assessment

Abstract ID	<i>Format: Oral presentations (12+ 3 min), *Invited talk (25 + 5 min)</i>
338	<b>TROPOMI SO<sub>2</sub> flux and Multigas measurements at Popocatepetl: insight into volcano dynamics and importance for crisis management</b> <i>R. Champion, S. Valade, T. Sayuri P. Zavala</i>
358	<b>Satellite measurements of plumes from the April 2021 eruption of La Soufrière, St Vincent</b> <i>I.A. Taylor, R.G. Grainger, A.T. Prata, S.R. Proud, T.A. Mather, D.M. Pyle</i>
737	<b>Trends in SO<sub>2</sub> emissions during eruption cycles at persistently degassing volcanoes</b> <i>S. Carn, V. Fioletov, C. McLinden, N. Krotkov, C. Li</i>
396	<b>Coupling multispectral ground and space TIR systems for monitoring volcanic emissions</b> <i>D.B. Williams, J.O. Thompson, M.S. Ramsey</i>
302	<b>*Inverting volcanic gas compositions for subsurface magma storage and launching depths</b> <i>T. Plank, S. Ding, M. de Moor</i>

**13:00 - 14:00** **Lunch**

14:00 - 15:00	408. From ground to space: Observations and modelling of volcanic gas and ash emissions for eruption forecasting and hazard and environmental impact assessment
Abstract ID	<i>Format: Oral presentations (12+ 3 min)</i>
224	<b>Gas dispersal model validation and related hazard assessment at La Solfatara crater, Campi Flegrei, Italy</b> <i>S. Massaro, A. Costa, F. Dioguardi, M. Stocchi, L. Sandri, J. Selva, G. Chiodini, G. Tamburello, G. Bini, G. Macedonio, S. Caliro, F. Rufino, A. Santi, R. Avino</i>
506	<b>Ensemble atmospheric dispersion modelling of volcanic species: interpreting ensemble data and applications</b> <i>L. Mingari, A. Folch, E. Vazquez, M. S. Osoro, A. Costa</i>
514	<b>Ensemble Dispersion Modelling of Volcanic Ash Resuspension</b> <i>E. Vazquez, L. Mingari, M. S. Osoro, A. Folch</i>
50	<b>Near real-time ash cloud height estimation based on GOES-16 satellite imagery: a case study at Cotopaxi volcano, Ecuador</b> <i>A. Vásconez Müller, B. Bernard, F.J. Vasconez</i>

**16:00-18:00** **La Ermita de Santa Cruz - Closing Ceremony (Open to public)**  
**Plenary Session 4: Participatory and Transdisciplinary work related to Disaster Risk Reduction**  
**Margarita Kenefic, Rudiger Escobar-Wolf, Eliza Calder**

**Room San José**

08:00 - 09:30	107. Whose Mountain is it Anyway? Volcanoes, Knowledge, and Tourism
Abstract ID	<i>Format: Oral presentations (12+ 3 min); ⚡ Lightning talk (7 min); Panel discussion</i>
36	<b>Fuego, Pacaya y Santiaguito volcanes. Un pequeño viaje a través de diferentes erupciones</b> <i>D. Rizzo</i>
650	<b>Community Symbiosis for Economic Sustainability and Mitigating Risk</b> <i>T. McKean</i>
380	<b>⚡ Tourism attitude and information on volcanic risk at Stromboli Island (Italy)</b> <i>R. Nave, A. Miso, T. Ricci, G. Prati</i>
207	<b>Lineamientos para el Geoturismo de volcanes en Colombia. Guidelines for Geotourism of volcanoes in Colombia</b> <i>V. Pirateque Lizarazo</i>
230	<b>Maar el Tabor, un Volcán Extinto en Vía de Extinción</b> <i>O.O. Briceño Amarillo, A.L. Pinzón</i>
662	<b>Panel presentation: Harnessing Local Knowledge and Collective Experience in Volcano Tourism (20 min) by Camilo Toledo; discussion</b>

**10:00 - 10:30** **Coffee Break**

10:30 - 12:00	106. Taking Information Exchange to the Next Level: Using Park Interpretation Methods to Enhance Your Science Communication
Abstract ID	<i>Format: Oral presentations (12 min); ⚡ Lightning talks (2 min); *Invited talk (22 min)</i>
240	<b>*Mount St. Helens Visitor Center Exhibit Renovation- Staying Relevant During Changing Times and Remaining Inclusive of All Voices.</b> <i>A. Adams</i>
330	<b>Llevando los volcanes al museo: archivar depósitos volcánicos con resina epoxi, un ejemplo en Arequipa (Perú)</b> <i>J. Morin, N. Manrique, R. Aguilar, C. Perales, J. Mariño, C. Jenifer Palacios Nuñez, C. Quispe, R. Churata, Y. Linares</i>
459	<b>⚡ Local Knowledge and Information Provision: Enhancing the Role of National Park Rangers in Icelandic Hazard Preparedness</b> <i>P. Vesaluoma</i>
540	<b>Scientific interpretation for community understanding and engagement in the Cuicocha Cotacachi Imbabura UNESCO Global Geopark, Ecuador</b> <i>Z.M. Villarreal, H.A. Reascos, A.I. Chalampunte, C. Mandón</i>
448	<b>Centro de Visitantes de Armero (CVA) historia, patrimonio y gestión del riesgo volcánico a través de “la lección de Armero”</b> <i>H.D. Nova Vargas, J.A. Nova Vargas</i>
425	<b>Time Travel Through Geoheritage Interpretation Develops an Environmental Conservation Ethic</b> <i>D. Torrey</i>
119	<b>Geoparks in volcanic areas and the disaster risk reduction</b> <i>S. Nakada</i>
124	<b>⚡ Park interpretation contributes powerful strategies for coordinated volcano awareness campaigns.</b> <i>C. Driedger, T. Cullings, P. Wold</i>

<b>12:00 - 13:00</b>	<b>105. Geodiversity in volcanic areas – New approaches to define, measure and promote volcano diversity and their implication for geohazard resilience and geocultural aspects</b>
Abstract ID	<i>Format: Oral presentations (12 + 3 min)</i>
665	<b>Valoración del Complejo Volcánico Nevado del Ruiz como patrimonio geológico</b> <i>M.E. Gómez Guerrero, G.P. Cortés Jiménez, M. Vargas Anaya, J.A. Ceballos Hernández, L.M. Martínez Tabares</i>
616	<b>Volcanic Influence on spatial biodiversity patterns in the Northern Andes</b> <i>C. González-Arango, N. Pardo</i>
432	<b>Volcanism in the center and southwest of Colombia: Origin, evolution, hazard, volcanic soils and geotourism</b> <i>S. Osorio-Ocampo, H. Murcia, L. Sánchez-Torres, L.A. Botero-Gómez, A. Guerra-Acosta, E. Ibargüen-Angulo, A.S. Rentería, A. Arias-Díaz, L. Vargas-Arcila, A. Toro, G. Bolaños-Cabrera, M. Bastidas-Bacca, A. Riascos-Hurtado, M. López, R. Aguillon-Estacio, B. Gómez-Gómez, E. Mejía</i>
573	<b>Geosítio mundial de la IUGS: Calicanto, pueblo inca sepultado por secuencia piroclástica de la erupción del Huaynaputina en 1600d.c.</b> <i>J. Mariño Salazar, C. Arias Salazar, K. Cueva Sandoval, J.-C. Thouret, B. Zavala Carrión, A. Finizola, B. van Wyk de Vries</i>

**13:00 - 14:00****Lunch**

<b>14:00 - 15:00</b>	<b>105. Geodiversity in volcanic areas – New approaches to define, measure and promote volcano diversity and their implication for geohazard resilience and geocultural aspects</b>
Abstract ID	<i>Format: Oral presentations (12 + 3 min)</i>
173	<b>Geodiversity in oceanic active volcanic island (Tenerife, Spain) to promote the geotourism</b> <i>J. Dóniz-Páez, R. García-Hernández, V. Leal Moreno, N.M. Pérez, P. Hernández</i>
249	<b>Beneath the Surface: A Transdisciplinary Approach to Characterizing Lava Caves in Tāmaki Makaurau Auckland, Aotearoa New Zealand.</b> <i>J. Ingold, J. Lindsay, K. Lewis, C. Bloom, K. Sila-Nowicka</i>
590	<b>Geopaths development in urban geosites: An instrument to promote biogeoheritage conservation and increase geohazard resilience in local communities</b> <i>M.-N. Guilbaud, M. del P. Ortega-Larrocea, S. Cram Heydrich, N. Villalba, E. Rodríguez Osnaya, E. Mérour, B. van Wyk de Vries</i>
308	<b>Biological crusts in the Xitle lava flow and their role in bioweathering of basaltic rock.</b> <i>M.F. Martínez-Báez Téllez, M. del P. Ortega Larrocea, M.N. Guilbaud, B. Van Wyk de Vries</i>

**16:00-18:00****La Ermita de Santa Cruz - Closing Ceremony (Open to public)****Plenary Session 4: Participatory and Transdisciplinary work related to Disaster Risk Reduction****Margarita Kenefic, Rudiger Escobar-Wolf, Eliza Calder****Room Obispo**

<b>08:00 - 09:30</b>	<b>426. The role of the non-governmental associations and organizations in the reduction of volcanic risk</b>
Abstract ID	<i>Format: Lightning talks ⚡ (5 min); Panel discussion</i>
27	⚡ <b>INVOLC: The IAVCEI International Network for the Advancement of Global Volcanology in Resource-Constrained Settings</b> <i>C.I. Rivera Cárdenas, S. Andreastuti, M.-A. Bornas, K. Fontijn, E. Garaebiti, O. Graham, V. Miller, A. Syavulisembo Muhindo, J.L. Palma, N. Pardo, A. Zafu Tadesse, Blas Ureña, G. Yirgu</i>
262	⚡ <b>Introducing VolcanoAid: A community-led non-profit organisation to build global resilience to volcanic eruptions.</b> <i>L. Mani, M. Cassidy</i>
695	⚡ <b>The role of the International Volcanic Health Hazard Network (IVHHN) in reducing health risks from future volcanic activity</b> <i>C. Horwell, D. Damby, C. Stewart, P. Baxter, T. Elias, E. Ilyinskaya, I. Tomašek</i>
721	⚡ <b>La Asociación Latinoamericana de Volcanología (ALVO): su historia, su presente y qué ofrecemos</b> <i>L.A. Rodríguez, P. Forte, D. Bertin, M.P. Jácome Paz, H. Delgado Granados, J.G. Viramonte J.L. Palma, M. Agosto</i>
677	⚡ <b>Senda y perspectivas de una red regional: Jóvenes Volcanólogos Latinoamericanos, JVLA.</b> <i>J. Paredes Mariño, N. Manrique Llerena, D. Rodríguez</i>
556	⚡ <b>The role of the AIV in the dissemination of volcanological knowledge and reduction of volcanic risk in Italy</b> <i>G. De Astis, P. Del Carlo, S. de Vita, P. Donato, D. Mele, C.A. Tranne, M. Viccaro, A. Vona</i>
559	⚡ <b>Proyecto Piloto para la Implementación de un Sistema de Alerta Temprana, ante amenazas Volcánicas en Guatemala.</b> <i>L.I. Girón Melgar, D. Secaira, M. Moncada, J. Giron, E. Maldonado, R. Yani, A. Roca, L. Capra Pedol, L. Caballero, D. Ferrés López</i>
523	⚡ <b>Volcanes sin Fronteras and the vision of best quality life through the diffusion of the knowledge of the volcanic surroundings.</b> <i>G. González, A. García, I. Meza</i>
629	⚡ <b>Los volcanes desde la academia, estudios sobre la actividad volcánica y acceso a la información</b> <i>D. González, C. Chun, D. Lara</i>
	<b>Panel discussion (30 min)</b>
	<b>Panelists: Pablo Forte, Claudia Inés Rivera Cárdena, David Damby, Luis Iván Girón Melgar, Mariana Patricia Jácome Paz (moderator)</b>

**09:30 - 10:00****423. Long-term engagement and interaction between civil authorities and volcano observatories: opportunities and lessons learnt**Abstract ID *Format: Oral presentations (12 min)*

<i>Abstract ID</i>	<i>Format: Oral presentations (12 min)</i>
125	<b>Built by professions that care—a long-term volcanic risk management system in the Cascade Range, Washington and Oregon, USA</b> <i>C. Driedger, H. Wright</i>
68	<b>Lessons Learned from Recent Rapid Onset Eruptions on the Island of Hawai'i.</b> <i>K. Hon, K. Muliken, T. Magno, F. Trusdell, J.C. Chang, N.I. Deligne, M. Zoeller, P.J. Dotray, I.A. Johanson, A.P. Ellis, R. Loh, J. Corrao, W. Hanson, D. Hyman, D. Phillips, M.P. Poland, W. Stovall</i>

**10:00 - 10:30** **Coffee Break**

<b>10:30 - 11:30</b>	<b>423. Long-term engagement and interaction between civil authorities and volcano observatories: opportunities and lessons learnt</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (12 min)</i>
512	<b>The ongoing multiparameter volcanic unrest at Mount Pelée (Martinique, France): challenges for scientific, monitoring and civil protection response</b> <i>J.-C. Komorowski, J. Corbeau, J.-B. de Chabaliere, F. Beauducel, G. Carazzo, C. Aubaud, F.R. Fontaine, A. Burtin, J. Vergne, J.-M. Saurel, F. Jadelus, D. Melezan, A. Andrieu, I. Fernandez, A. Potier, C. Vidal, J.-M. Lavenaire, J.-G. Gabriel, E. Chilin-Eusebe, I. Vlastelic, P.-H. Blard, G. Avice, T. Labasque, P. Agrinier, R. Grandin, J.-P. Métaixian, S. Moune, S. Bonaimé, A. Le Friant, A. M.-Dubuy, Lise Retailleau, A. Lemarchand, L. Zimmermann, B. Tibar</i>
647	<b>Long-term collaboration between Sakurajima Volcano Observatory and local authorities in Kagoshima for long-term Vulcanian...</b> <i>M. Iguchi</i>
567	<b>Interdisciplinary approaches for long term science/policy/society engagement on data-poor active ocean island volcanoes.</b> <i>A. Hicks, S. Loughlin</i>
110	<b>New developments, challenges and strategies in establishing a robust geophysical and environmental monitoring system of Pico de Orizaba volcano, Mexico</b> <i>R.I. Torres-Orozco, F. Córdoba Montiel, M.A. Morales, K. Sieron, C.M. Welsh Rodríguez, V. Márquez-Ramírez, L. Capra, A. Iglesias, S.U. Que, M.E. Nava Bringas, M. Moreno Rojas</i>
237	<b>Fire Departments role in volcanic evacuations and lessons learn from a 2013 Binational Exchange in Colombia</b> <i>Z. Gibson</i>

<b>11:30 - 13:00</b>	<b>424. Scientific -operational interface in volcanic crisis management: integrating national and international contributions</b>
<i>Abstract ID</i>	<i>Format: Oral presentations (10 + 3 min); ⚡ Lightning talks (6 + 3 min); Group discussion</i>
89	⚡ <b>Anticipatory Action and Early Action for Volcanic Crises: USAID/BHA and USGS Achievements and Remaining Challenges</b> <i>G. Mayberry, D. Ramsey, K. Mandala</i>
255	⚡ <b>The U.S. National Landslide Hazard Reduction Program: Opportunities to inform volcanic risk assessment and crisis management</b> <i>J. Riker</i>
98	<b>Recent USGS Volcano Science Center tabletop exercises: preparation and planning for crises</b> <i>H. Wright, S. Moran, M. Coombs, S. Ogburn, N. Deligne, F. Trusdell</i>
242	<b>The value chain approach for analysing warning systems and improvements – demonstrated for Hunga Tonga-Hunga Ha’apai</b> <i>A. Tupper, B. Ebert</i>
324	⚡ <b>Ensemble Short-Term Eruption Forecasting at Vulcano Island (Aeolian Islands, Italy)</b> <i>J. Selva, M. Taroni, D. Rouwet, L. Sandri, F. Cannavò</i>
541	<b>National and international contributions during La Palma (Canary Islands, Spain) eruption</b> <i>M. Asensio-Ramos, N.M. Pérez, P.A. Hernández, E. Padrón González, F. Rodríguez García, B.C. Coldwell, M.J. Pankhurst, J. Barrancos Martínez, G.D. Padilla Hernández, L. D’Auria, G.V. Melián Rodríguez</i>
700	<b>Co-producing the ECLIPSE programme with the Caldera Advisory Group, supporting the first Aotearoa NZ alert level rise for a supervolcano</b> <i>G. Leonard, C. Wilson, F. Illsley-Kemp, S. Barker, B. Scott, N. Fournier, S. Potter, D. Charlton, M.A. Clive, K. Tapuke, B. Smith, D. Johnston, T. Wilson, E. Mestel</i>
	<b>Group discussion (20 min)</b>

**13:00 - 14:00** **CAV Comission meeting**

**13:00 - 14:00** **Lunch**

<b>14:00 - 15:00</b>	<b>421. ¿Por qué siguen muriendo personas en zonas de alto riesgo volcánico?: Barreras cognitivas, institucionales y en el territorio que limitan una percepción del riesgo apropiada para evitar la pérdida de vidas en eventos volcánicos</b>
	<i>Format: Panel discussion</i>
	<b>Panelists: Manolo Barillas, Rosa Sanchez del Valle, Ricardo Berganza</b>

**Room Mesón del Obispo**



08:00 - 10:00		308. Imaginaries, perceptions and narratives of living in volcanic environments
Abstract ID	<i>Format: Oral presentations (10 + 3 min); ⚡ Lightning talks (8 + 3 min); Group discussion</i>	
69	⚡ <b>Experiential knowledge and narratives: Eruption stories of residents around Mayon and Bulusan Volcanoes, Philippines</b> <i>Ma. M. Martinez-Villegas, L.C. Mercader, A. Domiguiano, P. Karson Alanis, F. Bianca A. Gianan</i>	
773	<b>Creative Engagements with Volcanic Materials and Images from the Soufrière Hills Volcanic Crisis (Montserrat, West Indies)</b> <i>M.A.W. Rothenberg</i>	
406	<b>Our Bodies, Our Territories: Exploring the role of action research in understanding and shaping narratives of women's leadership roles during Volcanic Crisis</b> <i>T. Armijos Burneo, C. Sala, C. Rabe, M. Palacios Aracely Martinez, E. Calder</i>	
608	<b>Los volcanes como testigos del territorio en Guatemala: memoria, representación e imaginario</b> <i>A. Taracena</i>	
53	<b>About Time: Volcanism Between Indigeneity and Risk Across the Chile – Argentina Border</b> <i>C. Smith</i>	
424	<b>Volcanic risk perception of population exposed to highly active volcanism in the Southern Andes: Villarrica volcano, Chile.</b> <i>R. Calderon, L.E. Lara, V. Toloza</i>	
377	⚡ <b>Understanding diverse imaginaries of volcanoes in Chile and Argentina: Bringing different knowledges together</b> <i>A. Donovan, J. Morin, R. Walshe, A. Amigo, S. Garcia, C. Smith</i>	
<b>Group discussion (30 min)</b>		

10:00 - 10:30

Coffee Break

10:30 - 12:00		305. Relationships with the red zone
Abstract ID	<i>Format: Oral presentations (10 + 2 min); Panel discussion</i>	
253	<b>Three volcanoes: Complexities and different realities</b> <i>M. Calvache</i>	
599	<b>The long red zone of Montserrat (1995-present) and its challenges</b> <i>J.M. Marrero, G.A. Ryan</i>	
631	<b>Over the River Chronicles - Re-Imagining the Red Zone Take 2 - Action!</b> <i>S. Yorke, C. Durrant, M. Johnson, R. Robertson, J. Barclay, D. Pyle, T. Armijos</i>	
753	<b>The Community-Based Vigía Network at Tungurahua volcano, Ecuador Provided a Safety Cushion for Those Living in the Red Zone</b> <i>P.A. Mothes, P.A. Ramón</i>	
669	<b>Living in the red zone: over estimation of hazard, weakness of the law, or both?</b> <i>L.E. Lara, F. Cabezas, M. Piña-Gauthier, J. Quense, F. Arenas</i>	
651	<b>The complex and often contradictory realities of the red zone</b> <i>E.S. Calder, A. Petzey, D. Sapulu, T. Armijos, C. Sala Valdes, T. McKean, A. Cabrera Pacheco, R. Escobar Wolf</i>	
<b>Panel discussion (20 min)</b>		

12:00 - 13:00

306. Communities on the move: understanding the resettlement processes after a disaster

Abstract ID	<i>Format: Oral presentations (12 + 3 min); Group discussion</i>	
402	<b>Communities on the move: Understanding resettlement processes in Guatemala</b> <i>A.J. Cabrera Pacheco, C.A. Puac Álvarez, L. MacKenzie</i>	
544	<b>Sistematización de la experiencia del deslizamiento en Panabaj, año 2005</b> <i>C.A. Puac Alvarez</i>	
686	<b>Reconstructing houses, deconstructing communities: the impacts of displacement after the 2021 eruption in La Palma, Canary Islands</b> <i>A. Wynne Jones, S. Backhouse, B. Ireland, R. Rice, T. Backhouse, N. Puche, S. Cáceres-Leal, F. Castelló</i>	
<b>Group discussion (15 min)</b>		

13:00 - 14:00

Lunch

14:00 - 15:00		314. La educación en ambientes volcánicos y riesgos, una necesidad impostergable
Abstract ID	<i>Format: Oral presentations (10 min); Panel discussion</i>	
25	<b>Ciencia Ciudadana: Sensibilización a guardaparques, turistas, guías y lugareños sobre los peligros y técnicas de vigilancia volcánica en Costa Rica</b> <i>J.P. Sibaja-Brenes, R. Alfaro-Solis, M. Martínez-Cruz, I. Godfrey, G. Avar, G. Alvarado Induni</i>	

280	<b>Sala ACTIVA Memoria, Futuro y Vida, espacio de conocimiento sobre el riesgo volcánico en el municipio de Armero Guayabal – Colombia</b> <i>E.G. Ruiz Morales, L.M. Dorado González, S.P. Mendoza Ortiz, L.F. Cadena Amado</i>
554	<b>Fortalecimiento de Capacidades Comunitarios en la Reducción del Riesgo a Desastres y Los Riesgos Volcanicos</b> <i>W.F. Chigna Yuque, E.J.J. Maldonado, M.E. Ovalle Hernandez, J.L. Mejicanos Reyes</i>
739	<b>Visitas de la comunidad al OVDAS: acercando a la comunidad a los peligros volcánicos.</b> <i>A. Inostroza, A. Gaete, C. Vidal, C. Mardones, G. Pedreros, G. Velásquez, J. Quijada, J. Bon, J. San Martin, L. Bertin, L. Córdova, L. Bravo, L.E. Franco, M. Figueroa, M. A. Contreras, M. Abarzúa, O. Valderrama, S. Morales</i>
<b>Panel discussion (20 min)</b> Panelists: <b>Silvia Guadalupe Ramos Hernández, Deysi O. Jerez</b>	

**Room Doña Luisa**

<b>08:00 - 09:00</b>	<b>301. Living with Volcanoes – what are your concerns?</b>
	<i>Format: Documentary (45 min); Group discussion</i>
	<b>“Lava Bombs: Truths Behind the Volcano”</b>
	<b>Panel discussion (15 min)</b> Panelists: <b>Montserrat Roman Casamantina, Reinaldo Estevez Sanchez, Samuel Caceres Leal, Ruben Fernandez, Eugenio Fraile Nuez</b>

<b>09:00 - 10:00</b>	<b>422. La Palma: The Inforuption</b>
	<i>Format: Panel discussion</i>
	Panelists: <b>Stavros Meletlidis, Montserrat Román Casamantina, Reinaldo Estevez Sanchez, Roberto Gonzalo Moreno, Samuel Cáceres Leal, Rubén Fernández, Nieves Sánchez</b>

**10:00 - 10:30 Coffee Break**

<b>10:30 - 11:30</b>	<b>201. “Rapsodia telúrica”, un cortometraje sobre música contemporánea e infrasonidos volcánicos</b>
	<i>Format: Movie; Group discussion</i>
	Cortometraje <b>“Rapsodia Telúrica”</b> de Guillermo Escalón e Igor de Gandarias

<b>12:00 - 13:00</b>	<b>431. Volcanic warnings for all: How can we translate warnings and alerts in the context of a multi-hazard, technologically driven, diverse global community?</b>
	<i>Format: Round table discussion</i>

**Room Don Pedro**

<b>10:30 - 13:00</b>	<b>204. Festival of volcanic art: a dialogue of knowledges inspired by volcanoes</b>
<i>Abstract ID</i>	<i>Format: Open fair/ Exhibition</i>
493	<b>Exploring “Blueprints for Resilience”</b> <i>P.N.S. Irapta, S. Coffey, R. Hall</i>
691	<b>Nina y el origen del sillar”, video animado que educa didácticamente sobre la historia geológica de Arequipa</b> <i>N. Manrique, R. Aguilar, B. Van Wyk de Vries, F. RivaMar</i>
205	<b>Volcanes y amenazas naturales; desde el museo y el pasado, al ciberespacio y el futuro</b> <i>K. Barragán, E. Sevilla, M. Bedoya, M.A. Vásquez, P. Narváez, M. Sabag, D. Andrade</i>
769	<b>The Montserrat Volcano Babies project: an international and multi-disciplinary collaboration to build ourselves a brighter future</b> <i>K. Pascal, T. Williams, J. Browne, J. Barclay, D. Pyle, G. Ryan, E.P Joseph</i>
594	<b>The impact of school outreach through subsequent art: The “My Deep-Sea Volcano” school art project from the IAVCEI Commission on Submarine Volcanism</b> <i>S.J. Mitchell, A. Verolino, E. McCully, P. Nomikou</i>
408	<b>Tejiendo Renaceres: ‘Del desastre volcánico a la recuperación psicosocial: arte, narración e intercambio de conocimientos entre Colombia, Ecuador y Guatemala’</b> <i>T. Armijos Burneo (en nombre de todas las personas que participaron en el proyecto)</i>
390	<b>Bodily Becoming: A Novel Approach to Tacit Knowledge Production</b>

390	<i>C. Reed, A. Hicks</i>
137	<b>Tiempo en Piedra: una historia que hila los saberes de los ciudadanos colonizando las lavas.</b> <i>K. Calderón Gastelum, M. del P. Ortega Larrocea</i>
74	<b>Once Upon A Time In The West: communicating volcanic disaster through arts-based participatory methods</b> <i>A.K. Naismith</i>
445	<b>I went for a walk in the mountain and I never came back</b> <i>M. Johnson, K. Best</i>
393	<b>(R)existencias: Los espacios de las mujeres tz'utujiles después del desastre</b> <i>A.J. Cabrera Pacheco</i>
623	<b>Bosque de Lava</b> <i>C. González-Arango</i>
634	<b>Adaptación de sentimientos y pensamientos en el arte: expresiones desde una zona roja en Guatemala</b> <i>D.A. Reanda Sapalú, A.B. Petzey, C. Reanda, M. Reanda, A. Chivillu, Á. Xicay, C. Sala, T. Armijo</i>
638	<b>Las plantas del Mamá Juana</b> <i>C. González-Arango, P.A. Rodríguez, A.C. Zambrano, L. Palacios Ordóñez, J. Muñoz Gómez, S. Ordóñez Bolaños, M. Alvear, M.D. Moreno</i>
447	<b>Changing Landscapes</b> <i>C. Durrant, S. Yorke, J. Bowens, D. Michael, G. Hoyte, R. Hackshaw, P. Fraser, D. Thomas, K. Wilson, L. Spring, K. Wilson</i>
716	<b>Momotombo: A composition for chamber choir by Gilda Lyons</b> <i>G. Lyons, S. Tramontano</i>

16:00-18:00

La Ermita de Santa Cruz - Closing Ceremony (Open to public)  
**Plenary Session 4: Participatory and Transdisciplinary work related to Disaster Risk Reduction**  
Margarita Kenefic, Rudiger Escobar-Wolf, Eliza Calder