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Silvana Hidalgo, PhD

Education

- Oct 2003 – Dec 2006* **Université Blaise Pascal - Clermont-Ferrand II**
PhD, Sciences de la Terre
, France
- Sep 2001 – Jun 2002* **Université Blaise Pascal - Clermont-Ferrand II**
MSc., Sciences de la Terre
, France
- Oct 1995 – Sep 2001* **Escuela Politécnica Nacional**
Enginner, Geology
, Ecuador

Thesis

Silvana Hidalgo: *Les interactions entre magmas calco-alcalins "classiques" et adakitiques : exemple du complexe volcanique Atacazo-Ninahuilca 'Equateur)*.. 01 /2006

Research Experience

- Jan 2007 – today* **Professor (Assistant)**
Escuela Politécnica Nacional, Instituto Geofísico
Quito, Ecuador

Awards & Grants

- Feb 2017* Award: Premio Mathilde Hidalgo "Científico del Año"

Skills & Activities

- Skills* Petrology, Igneous Petrology, Geodynamics, Isotope Geochemistry, Geology-Volcanology, Oxygen Isotopes, Geochemistry, Petrography, Geochronology, DOAS, Geophysics, Radiometric Dating, Minerals, Volcanology
- Languages* English, French, Italian, Spanish; Castilian
- Scientific Memberships* ALVO, IAVCEI, CCVG
- Interests*

Book Chapters

Dmitri Rouwet, Silvana Hidalgo, Erouscilla P. Joseph, Gino González-Ilama: *Fluid Geochemistry and Volcanic Unrest: Dissolving the Haze in Time and Space*. Advances in Volcanology, 07/2017;, DOI:10.1007/11157_2017_12

Patricia A. Mothes, Mario C. Ruiz, Edwin G. Viracucha, Patricio A. Ramón, Stephen Hernández, Silvana Hidalgo, Benjamin Bernard, Elizabeth H. Gaunt, Paul Jarrín, Marco A. Yépez, Pedro A. Espín: *Geophysical Footprints of Cotopaxi's Unrest and Minor Eruptions in 2015: An Opportunity to Test Scientific and Community Preparedness*. Advances in Volcanology, 07/2017;, DOI:10.1007/11157_2017_10

Valenti Sallares, Andrés Pazmiño, Carlos Martillo, Alcinoe calahorrano, César Witt, Silvana Hidalgo: *Scientific rationale for the continental shelf extensión off hotspot islands: The case of the Galapagos Archipelago*. Technical and Legal Aspects of the Regimes of the Continental Shelf and the Area, Edited by Z. Gao, H. Zhang, J. Li, 01/2011: pages 162-178; China Ocean Press., ISBN: 978-7-5027-8009-8

Journal Publications

Jean Battaglia, Silvana Hidalgo, Benjamin Bernard, Alexander L Steele, Santiago Arellano, Krupskaia Acuña: *Autopsy of an eruptive phase of Tungurahua volcano (Ecuador) through coupling of seismo-acoustic and SO₂ recordings with ash characteristics*. Earth and Planetary Science Letters 04/2019; 511:223-232., DOI:10.1016/j.epsl.2019.01.042

Benjamin Bernard, Michael J. Stock, Diego Coppola, Silvana Hidalgo, Marco Bagnardi, Sally Gibson, Stephen Hernandez, Patricio Ramón, Matthew Gleeson: *Chronology and phenomenology of the 1982 and 2015 Wolf volcano eruptions, Galápagos Archipelago*. Journal of Volcanology and Geothermal Research 02/2019; 374., DOI:10.1016/j.jvolgeores.2019.02.013

Mathilde Bablon, Xavier Quidelleur, Pablo Samaniego, Jean-Luc Le Pennec, Laurence Audin, Hervé Jomard, Stéphane Baize, Céline Liorzou, Silvana Hidalgo, Alexandra Alvarado: *Interactions between volcanism and geodynamics in the southern termination of the Ecuadorian arc*. Tectonophysics 12/2018; 751., DOI:10.1016/j.tecto.2018.12.010

Francisco Vasconez, Patricio Ramon, Stephen Hernandez, Silvana Hidalgo, Benjamin Bernard, Mario Ruiz, Alexandra Alvarado, Peter La Femina, Gorki Ruiz: *The different characteristics of the recent eruptions of Fernandina and Sierra Negra volcanoes (Galápagos, Ecuador)*. DOI:10.30909/vol.01.02.127133

Diego F. Narvaez, Estelle F. Rose-Koga, Pablo Samaniego, Kenneth T. Koga, Silvana Hidalgo: *Constraining magma sources using primitive olivine-hosted melt inclusions from Puñalica and Sangay volcanoes (Ecuador)*. Contributions to Mineralogy and Petrology 10/2018; 173(10)., DOI:10.1007/s00410-018-1508-8

Silvana Hidalgo, Jean Battaglia, Santiago Arellano, Daniel Sierra, Benjamin Bernard, Rene Parra, Peter Kelly, Florian Dinger, Charlotte Barrington, Pablo Samaniego: *Evolution of the 2015 Cotopaxi Eruption Revealed by Combined Geochemical & Seismic Observations*. Geochemistry Geophysics Geosystems 06/2018; 19(7)., DOI:10.1029/2018GC007514

Taryn Lopez, Felipe Aguilera, Franco Tassi, J. Maarten de Moor, Nicole Bobrowski, Alessandro Aiuppa, Giancarlo Tamburello, Andrea L. Rizzo, Marco Liuzzo, Fátima Viveiros, Carlo Cardellini, Catarina Silva, Tobias Fischer, Philippe Jean-Baptiste, Ryunosuke Kazayaha, Silvana Hidalgo, Kalina Malowany, Gregor Lucic, Emanuela Bagnato, Baldur Bergsson, Kevin Reath, Marcello Liotta, Simon Carn, Giovanni Chiodini: *New insights into the magmatic-hydrothermal system and volatile budget of*

Lastarria volcano, Chile: Integrated results from the 2014 IAVCEI CCVG 12th Volcanic Gas Workshop.
Geosphere 05 / 2018; 14(3)., DOI:10.1130/GES01495.1

Mathilde Bablon, Xavier Quidelleur, Pablo Samaniego, Jean-Luc Le Pennec, Pierre Lahitte, Céline Liorzou, Jorge Eduardo Bustillos, Silvana Hidalgo: *Eruptive chronology of Tungurahua volcano (Ecuador) revisited based on new K-Ar ages and geomorphological reconstructions.* Journal of Volcanology and Geothermal Research 05 / 2018; 357., DOI:10.1016/j.jvolgeores.2018.05.007

Isabelle A. Taylor, James Preston, Elisa Carboni, Tamsin A. Mather, Roy G. Grainger, Nicolas Theys, Silvana Hidalgo, Brendan McCormick Kilbride: *Exploring the Utility of IASI for Monitoring Volcanic SO₂ Emissions.* 04 / 2018; 123(10)., DOI:10.1002/2017JD027109

Gaëtan Merlhiot, Martial Mermilliod, Jean-Luc Le Pennec, Silvana Hidalgo, Laurie Mondillon: *Reducing uncertainty to promote appropriate decisions when facing hazardous phenomena at an active volcano.* Journal of Applied Social Psychology 03 / 2018;, DOI:10.1111/jasp.12507

Florian Dinger, Nicole Bobrowski, Simon Warnach, Stefan Bredemeyer, Silvana Hidalgo, Santiago Arellano, Bo Galle, Ulrich Platt, Thomas Wagner: *Periodicity in the BrO/SO₂ molar ratios in the volcanic gas plume of Cotopaxi and its correlation with the Earth tides during the eruption in 2015.* Solid Earth 03 / 2018; 9(2):247-266., DOI:10.5194/se-9-247-2018

Florian Dinger, Nicole Bobrowski, Simon Warnach, Stefan Bredemeyer, Silvana Hidalgo, Santiago Arellano, Bo Galle, Ulrich Platt, Thomas Wagner: *Periodicity in the BrO/SO₂ molar ratios in the volcanic gas plume of Cotopaxi and its correlation with the Earth tides during the eruption in 2015.* Solid Earth Discussions 09 / 2017;, DOI:10.5194/se-2017-89

Santiago D Santamaría F, Edwin Telenchana, Benjamin Bernard, Silvana Hidalgo, Bernardo Beate, Marco Córdova, Diego Narváez: *Registro de erupciones ocurridas en los Andes del Norte durante el Holoceno: Nuevos resultados obtenidos en la turbera de Potrerillos, Complejo Volcánico Chiles-Cerro Negro.*

Santiago Santamaría, Edwin Telenchana, Benjamin Bernard, Silvana Hidalgo, Bernardo Beate, Marco Córdova, Diego Narváez: *Record of eruptions occurred in the northern Andes during the Holocene: New results obtained from the Potrerillos peatbog, Chiles-Cerro Negro Volcanic Complex.* 07 / 2017; 39:7-16.

Marie-Anne Ancellin, Pablo Samaniego, Ivan Vlastélic, François Nauret, Mouhcine Gannoun, Silvana Hidalgo: *Across-arc versus along-arc Sr-Nd-Pb isotope variations in the Ecuadorian volcanic arc.* Geochemistry Geophysics Geosystems 02 / 2017;, DOI:10.1002/2016GC006679

Peter Lübecke, Johannes Lampel, Santiago Arellano, Nicole Bobrowski, Florian Dinger, Bo Galle, Gustavo Garzón, Silvana Hidalgo, Zoraida Chacón Ortiz, Leif Vogel, Simon Warnach, Ulrich Platt: *Retrieval of absolute SO₂ column amounts from scattered-light spectra: Implications for the evaluation of data from automated DOAS networks.* Atmospheric Measurement Techniques 11 / 2016; 9(12):5677-5698., DOI:10.5194/amt-9-5677-2016

Benjamin Bernard, Jean Battaglia, Antonio Proaño, Silvana Hidalgo, Francisco Váscone, Stephen Hernandez, Mario Ruiz: *Relationship between volcanic ash fallouts and seismic tremor: quantitative assessment of the 2015 eruptive period at Cotopaxi volcano, Ecuador.* Bulletin of Volcanology 11 / 2016; 78(11)., DOI:10.1007/s00445-016-1077-5

H. Elizabeth Gaunt, Benjamin Bernard, Silvana Hidalgo, Antonio Proaño, Heather Wright, Patricia Mothes, Evelyn Criollo, Ulrich Kueppers: *Juvenile magma recognition and eruptive dynamics inferred from the analysis of ash time series: The 2015 reawakening of Cotopaxi volcano.* Journal of Volcanology and Geothermal Research 10 / 2016; 328., DOI:10.1016/j.jvolgeores.2016.10.013

Silvana Hidalgo, Jean Battaglia, Santiago Arellano, Alexander Steele, Benjamin Bernard, Julie Bourquin, Bo Galle, Santiago Arrais, Freddy Váscone: *SO₂ degassing at Tungurahua volcano (Ecuador) between*

2007 and 2013: Transition from continuous to episodic activity. Journal of Volcanology and Geothermal Research 06/2015; 298:1-14., DOI:10.1016/j.jvolgeores.2015.03.022

Benjamin Bernard, Silvana Hidalgo, Claude Robin, Bernardo Beate, Jenny Quijozaca: *The 3640–3510 BC rhyodacite eruption of Chachimbiro compound volcano, Ecuador: a violent directed blast produced by a satellite dome.* Bulletin of Volcanology 09/2014; 76(9-9):1-20., DOI:10.1007/s00445-014-0849-z

Brendan T McCormick, Michael Herzog, Jian Yang, Marie Edmonds, Tamsin A. Mather, Simon A. Carn, Silvana Hidalgo, Baerbel Langmann: *A comparison of satellite- and ground-based measurements of SO₂ emissions at Tungurahua volcano, Ecuador.* Journal of Geophysical Research Atmospheres 04/2014., DOI:10.1002/2013JD019771

Benjamin Bernard, Jorge Bustillos, Bridget Wade, Silvana Hidalgo: *Influence of the wind direction variability on the quantification of tephra fallouts: December 2012 and March 2013 Tungurahua eruptions.* 06/2013; Vol5(No 1):A14-A21., DOI:10.18272/aci.v5i1.112

M.-P Ledru, V Jomelli, P Samaniego, M Vuille, S Hidalgo, M Herrera, C Ceron: *The Medieval Climate Anomaly and the Little Ice Age in the eastern Ecuadorian Andes.* Climate of the Past 02/2013; 9(1):307-321., DOI:10.5194/cp-9-307-2013

Alice Colman, John M Sinton, Scott M White, J Timothy McClinton, Julie A Bowles, Kenneth H Rubin, Mark D Behn, Buffy Cushman, Deborah E Eason, Tracy KP Gregg, Karl Grönvold, Silvana Hidalgo, Julia Howell, Owen Neill, Chris Russo: *Effects of variable magma supply on mid-ocean ridge eruptions: Constraints from mapped lava flow fields along the Galapagos Spreading Center.* Geochemistry Geophysics Geosystems 08/2012; 13:Q08014., DOI:10.1029/2012GC004163

Silvana Hidalgo, Marie C. Gerbe, Hervé Martin, Pablo Samaniego, Erwan Bourdon: *Role of crustal and slab components in the Northern Volcanic Zone of the Andes (Ecuador) constrained by Sr–Nd–O isotopes.* Lithos 02/2012; 132-133:180-192., DOI:10.1016/j.lithos.2011.11.019

Pablo Samaniego, Jean-Luc Le Pennec, Claude Robin, Silvana Hidalgo: *Petrological analysis of the pre-eruptive magmatic process prior to the 2006 explosive eruptions at Tungurahua volcano (Ecuador).* Journal of Volcanology and Geothermal Research 01/2011; 199(1):69-84., DOI:10.1016/j.jvolgeores.2010.10.010

S. INGUAGGIATO, S. HIDALGO, B. BEATE, J. BOURQUIN: *Geochemical and isotopic characterization of volcanic and geothermal fluids discharged from the Ecuadorian volcanic arc.* Geofluids 10/2010; 10(4):525 - 541., DOI:10.1111/j.1468-8123.2010.00315.x

Bo Galle, Mattias Johansson, Claudia Rivera, Yan Zhang, Manne Kihlman, Christoph Kern, Thomas Lehmann, Ulrich Platt, Santiago Arellano, Silvana Hidalgo: *Network for Observation of Volcanic and Atmospheric Change (NOVAC)—A global network for volcanic gas monitoring: Network layout and instrument description.* Journal of Geophysical Research Atmospheres 03/2010; 115(D5-D5):1-19., DOI:10.1029/2009JD011823

Silvana Hidalgo, Michel Monzier, Gilles Chazot, Jean-Philippe Eissen, Johannes Van Der Plicht, Minard L. Hall: *Late Pleistocene and Holocene activity of the Atacazo–Ninahuilca Volcanic Complex (Ecuador).* Journal of Volcanology and Geothermal Research 09/2008; 176(1)., DOI:10.1016/j.jvolgeores.2008.05.017

Silvana Hidalgo, Michel Monzier, Hervé Martin, Gilles Chazot, Jean-Philippe Eissen, Jo Cotten: *Adakitic magmas in the Ecuadorian Volcanic Front: Petrogenesis of the Iliniza Volcanic Complex (Ecuador).* Journal of Volcanology and Geothermal Research 01/2007; 159(4):366-392., DOI:10.1016/j.jvolgeores.2006.07.007

Conference Proceedings

Benjamin Bernard, Santiago Santamaría, Silvana Hidalgo, Alexandra Alvarado: *How adequate is the Ecuadorian volcanic surveillance system? Insights from threat analysis and monitoring network assessment.* Cities on Volcanoes 10, Naples, Italy; 09/2018

Patricia A Mothes, Elizabeth H. Gaunt, Marcio C. Ruiz, Minard L. Hall, Silvana Hidalgo: *Step by Step Awakening at Cotopaxi Volcano: A new look at the geophysical beginnings of recent and past eruptions and conduit processes.* IAVCEI 2017 Scientific Assembly, Portland Oregon, USA; 08/2017

Joao Lages, Alessandro Aiuppa, Andrea Luca Bernard, Tobias Fischer, Diego Narváez, Philipson Bani, Yves Moussallam, C Ian Schipper, Viviana Burbano, Silvana Hidalgo, Pablo Samaniego, Jean-Luc Le Pennec, Benjamin Bernard, Gustavo Garzón: *Subduction dynamics, mantle and crustal processes at arc volcanoes, investigated by relative CO₂/ST abundances and 3He/4He isotope signatures.* IAVCEI 2017 General Assembly, Portland, Oregon, USA; 08/2017

Silvana Hidalgo, Jean Battaglia, Santiago Arellano, Daniel Sierra, René Parra, Pablo Samaniego, Peter Kelly, Benjamin Bernard: *The Cotopaxi 2015 eruptive phase: insights from gas and glass.* IAVCEI 2017 General Assembly; 08/2017

Santiago D Santamaría F, Benjamin Bernard, Silvana Hidalgo: *Análisis de la frecuencia de erupciones explosivas en el arco volcánico ecuatoriano durante el Holoceno.* VIII Jornadas en Ciencias de la Tierra, Quito, Ecuador; 05/2017

Edwin Telenchana, Benjamin Bernard, Silvana Hidalgo, Bernardo Beate: *Modelo evolutivo del volcán Chiles.* VIII Jornadas en Ciencias de la Tierra; 05/2017

Francisco Vásconez, Daniel Andrade, Benjamin Bernard, Silvana Hidalgo: *Delimitación de zonas amenazadas por lahares en el drenaje Occidental del Nevado Cayambe.* Jornadas en Ciencias de la Tierra 8, Quito, Ecuador; 05/2017

Helen E. Gaunt, Benjamin Bernard, Silvana Hidalgo, Antonio Proaño, Heather M. N. Wright, Patricia A. Mothes, Evelyn Criollo: *Eruptive Dynamics Inferred from Textural Analysis of Ash Time Series: The 2015 Reawakening of Cotopaxi Volcano.* AGU Fall Meeting, San Francisco, USA; 12/2016

Santiago D Santamaría F, Benjamin Bernard, Silvana Hidalgo: *Ecuadorian volcanic events and geochronological database: insight into the complex eruptive rate of a continental volcanic arc.* Cities on Volcanoes 9, Puerto Varas, Chile; 11/2016

Ulrich Kueppers, Paul Ayris, Benjamin Bernard, Pierre Delmelle, Kate Dobson, Guilhem Douillet, Yan Lavallée, Sebastian B. Mueller, Donald B. Dingwell, Silvana Hidalgo: *Volcano vs. environment: Where, when and why does ash aggregate?* Cities on Volcanoes 9, Puerto Varas, Chile; 11/2016

Alex López, Juan Ramírez, Francisco Vásconez, Benjamín Bernard, Fausto Valencia, Silvana Hidalgo, Patricio Ramón, Franklin Quilumba: *Volcanic ash impacts on the dielectric strength of HVAC Outdoor Suspension Insulators: the case of Cotopaxi and Tungurahua volcanoes (Ecuador).* Cities on Volcanoes 9, Puerto Varas - Chile; 11/2016

Francisco Vásconez, Luis Maisincho, Bolívar Cáceres, Edwin Telenchana, Cristina Argoti, José M Marrero, Stefanie Almeida, Silvana Hidalgo, Benjamin Bernard, Verónica Lema, Daniel Andrade, Patricio Ramón: *Glacier Hazard: the case of secondary lahars in Yambo Rumi ravine at Chimborazo volcano (Ecuador).* Cities on Volcanoes 9, Puerto Varas - Chile; 11/2016

H Elizabeth Gaunt, Benjamin Bernard, Silvana Hidalgo, Antonio Proaño, Heather Wright, Patricia Mothes, Evelyn Criollo: *Near real-time ash time series analysis for hazard assessment: the 2015 reawakening of Cotopaxi volcano.* Cities on Volcanoes 9, Puerto Varas, Chile; 11/2016

Silvana Hidalgo, Jean Battaglia, Santiago Arellano, Daniel Sierra, René Parra, Peter Kelly, Benjamin Bernard, Charlotte Barrington: *Geochemical signals of unrest and eruption of Cotopaxi volcano in 2015.* Cities on Volcanoes 9, Puerto Varas, Chile; 11/2016

Jean Battaglia, Silvana Hidalgo, Benjamin Bernard, Alexander Steele, Santiago Arellano: *Imaging eruptive dynamics and vent conditions at Tungurahua volcano (Ecuador) through seismo-acoustic and SO₂ flux measurements.* Cities on Volcanoes 9, Puerto Varas, Chile; 11/2016

Silvana Hidalgo, Jean Battaglia, Daniel Sierra, Charlotte Barrington, Francisco Vásconez, Santiago Arellano: *EMISIONES DE SO₂ DE LOS VOLCANES TUNGURAHUA Y COTOPAXI: APORTE AL MONITOREO DE LA ACTIVIDAD VOLCÁNICA.* Congreso Anual de Meteorología y Calidad del Aire, Quito - Ecuador; 04/2016

Andrew Bell, Stephen Hernandez, Elizabeth Gaunt, Patricia Mothes, Silvana Hidalgo, Mario Ruiz: . *Insights into the origins of drumbeat earthquakes, periodic low frequency seismicity, and plug degradation from multi-instrument monitoring at Tungurahua volcano, Ecuador, April 2015.* European Geosciences Union General Assembly 2016 Vienna | Austria | 17–22 April 2016; 04/2016

Silvana Hidalgo, Benjamin Bernard, Jean Battaglia, Elizabeth Gaunt, Charlotte Barrington, Daniel Andrade, Patricio Ramón, Santiago Arellano, Hugo Yepes, Antonio Proaño, Stefanie Almeida, Daniel Sierra, Florian Dinger, Peter Kelly, René Parra, Nicole Bobrowski, Bo Galle, Marco Almeida, Patricia Mothes, Alexandra Alvarado, IGEPN Team: *Cotopaxi volcano's unrest and eruptive activity in 2015: mild awakening after 73 years of quiescence.* EGU General Assembly, Vienna, Austria; 04/2016

Francois Nauret, Marie-Anne Ancellin, Ivan Vlastelic, Pierre-Yves Tournigand, Pablo Samaniego, Jean-Luc Le Pennec, Mouhcine Gannoun, Silvana Hidalgo, Pierre Schiano: *Lead isotope constraints on the origin of andesite and dacite magmas at Tungurahua volcano (Ecuador).* European Geosciences Union; 04/2016

Benjamin Bernard, Patricio Ramon, Heather Wright, Alicia Guevara, Silvana Hidalgo, Daniel Pacheco, Diego Narváez, Francisco Vásconez: *Preliminary Results on the 2015 Eruption of Wolf Volcano, Isabela Island, Galápagos: Chronology, Dispersion of the Volcanic Products, and Insight into the Eruptive Dynamics.* AGU Fall Meeting, San Francisco, USA; 12/2015

Gabriela Arias, Claudia Molina Polania, Mario Ruiz, Hiroyuki Kumagai, Stephen Hernandez, Morgan Plain, Patricia Mothes, Marco Yepez, Charlotte Barrington, Silvana Hidalgo: *Very Long Period Seismicity Accompanying Increasing Shallower Activity at Cotopaxi Volcano.* AGU Fall Meeting, San Francisco; 12/2015

Stephen Hernandez, Mario Ruiz, Wendy McCausland, Stephanie Prejean, Patricia Mothes, Andrew Bell, Silvana Hidalgo, Charlotte Barrington, Marco Yepez, Santiago Aguaiza, Morgan Plain: *Recent Seismic and Geodetic Activity at Multiple Volcanoes in the Ecuadorean Andes.* AGU Fall Meeting, San Francisco; 12/2015

Jean Battaglia, Julie Hartmann, Silvana Hidalgo, Jean Michel Douchain, Jorge Cordova, Alexandra Alvarado, Mario Ruiz, René Parra: *Location and Waveform Classification of Seismicity at Tungurahua Volcano (Ecuador) During the February and April 2014 Eruptive Phases.* AGU Fall Meeting, San Francisco; 12/2015

Santiago Santamaría, Edwin Telenchana, Benjamin Bernard, Silvana Hidalgo, Diego Narváez, Marco Córdova: *Registro de erupciones holocénicas en los Andes del Norte: Nuevos resultados obtenidos en la turbera de Potrerillos, Volcán Cerro Negro.* III Taller de Geoarqueología Latinoamericana, Quito; 08/2015

Benjamin Bernard, Claude Robin, Bernardo Beate, Silvana Hidalgo: *Tefrocronología del volcán Chachimbiro: implicación en la ocupación humana en el cantón de Urcuquí.* III Taller de Geoarqueología

Latinoamericana: Cenizas Holocénicas el los Andes Septentrionales; 08 /2015,
DOI:10.13140 /RG.2.1.2193.2000

Peter Lübcke, Johannes Lampel, Nicole Bobrowski, Santiago Arellano, Bo Galle, Gustavo Garzón, Silvana Hidalgo, Leif Vogel, Simon Warnach, Ulrich Platt: *DOAS evaluation of volcanic SO₂ using a modeled background spectrum: Examples from the NOVAC stations at Nevado del Ruiz (Colombia) and Tungurahua (Ecuador)*. DOAS evaluation of volcanic SO₂ using a modeled background spectrum: Examples from the NOVAC stations at Nevado del Ruiz (Colombia) and Tungurahua (Ecuador), Vienna, Austria; 04 /2015

Mario Ruiz, Hugo Yepes, Minard Hall, Patricia Mothes, Patricio Ramon, Silvana Hidalgo, Daniel Andrade, Silvia Vallejo Vargas, Alexander Steele, Juan Anzieta, Hugo Ortiz, Pablo Palacios, Alexandra Alvarado, Wilson Enriquez, Freddy Vasconez, Mayra Vaca, Santiago Arrais, Guillermo Viracucha, Benjamin Bernard: *Volcano Monitoring in Ecuador: Three Decades of Continuous Progress of the Instituto Geofisico -Escuela Politecnica Nacional*. AGU Fall Meeting, San Francisco; 12 /2014, DOI:10.13140 /2.1.1321.7607

Mario Ruiz, Diego Gomez, Roberto Torres, Oscar Cadena, Patricia Mothes, Juan Anzieta, Daniel Pacheco, Benjamin Bernard, Wilson Acero, Silvana Hidalgo, Wilson Enriquez, Andrea Cordova: *Unrest of Chiles – Cerro Negro volcanic complex: A binational Ecuador – Colombia effort*. AGU Fall Meeting, San Francisco; 12 /2014, DOI:10.13140 /2.1.5155.6168

Silvana Hidalgo, Pablo Palacios, Angélica Robles, Daniel Pacheco, Jean Battaglia, Vinicio Yuccha, Diego Narvaez, Nathalie Hasselle, Sonja Storm, Celia Guergouz: *Results from CO₂ measurement campaigns at Cuicocha crater lake (Ecuador)*. Cities on Volcanoes 8, Yogyakarta, Indonesia; 09 /2014

Jean Battaglia, Silvana Hidalgo, Jean-Michel Douchain, Alexandra Alvarado, Benjamin Bernard, Mario Ruiz, Juan Anzieta, Jorge Cordova, Hugo Ortiz, Freddy Vasconez: *Preliminary insights into data recorded by a temporary broadband seismic network at Tungurahua volcano (Ecuador)*. Cities on Volcanoes 8, Yogyakarta (Indonesia); 09 /2014

Silvana Hidalgo, Benjamin Bernard, Claude Robin, Bernardo Beate: *Pre-eruptive conditions of the 3640 – 3510 BC rhyodacite blast of Chachimbiro compound volcano, Ecuador*. Cities on Volcanoes 8, Yogyakarta (Indonesia); 09 /2014

Diego Narvaez, Benjamin Bernard, Silvana Hidalgo, Sébastien Leibrandt, Jean-Luc Le Pennec, Julia Eychenne, Guilhem Douillet: *Eruptive dynamics based on ash sequence analysis: the example of March and July 2013 eruptive phases at Tungurahua volcano, Ecuador*. Cities on Volcanoes 8, Yogyakarta, Indonesia; 09 /2014

Guilhem Amin Douillet, Benjamin Bernard, Silvia Vallero Vargas, Joan A Gonzalez, Ulrich Kueppers, Patricio Ramón, Hugo Yepes, Silvana Hidalgo, Kai-Uwe Hess, Patricia Mothes: *Deposits from the 1 February 2014 eruption of Tungurahua volcano (Ecuador)*. Cities on Volcanoes 8, Yogyakarta, Indonesia; 09 /2014

Silvia Vallejo Vargas, Fernanda Naranjo, Patricio Ramón, Hugo Yepes, Silvana Hidalgo, Juan Anzieta, Benjamin Bernard, Diego Narváez, Patricia Mothes, Guilhem Amin Douillet: *The Vulcanian eruption of February 1st, 2014 at Tungurahua volcano, Ecuador*. Cities on Volcanoes 8, Yogyakarta, Indonesia; 09 /2014

Silvana Hidalgo, Jean Battaglia, Benjamin Bernard, Alexander Steele, Santiago Arellano, Bo Galle: *Identifying open and closed system behaviors at Tungurahua volcano (Ecuador) using SO₂ and seismo-acoustic measurements*. EGU General Assembly, Vienna (Austria); 04 /2014

Bo Galle, Santiago Arellano, Ulrich Platt, Gustavo Garzon, Silvana Hidalgo, Yalire Mapendano, Novac Partners: *Inventory of gas emission rate measurements from volcanoes of the global Network for Observation*

of Volcanic and Atmospheric Change (NOVAC) -present status of the network and some study cases.
IAVCEI 2013 Scientific Assembly, Kagoshima, Japan; 07/2013

Silvana Hidalgo, Jean Battaglia, Alexander L Steele, Santiago Arellano, Benjamin Bernard, Mario Ruiz, Bo Galle: *Open and closed system eruptive dynamics at Tungurahua volcano constrained by SO₂ emission rate and seismo-acoustic intensity measurements.* IAVCEI Scientific Assembly 2013, Kagoshima (Japan); 07/2013

John J. Lyons, Mario C. Ruiz, Benjamin Bernard, Silvana Hidalgo, Hugo Ortiz: *Dissecting the August 2012 paroxysmal eruption: advances and challenges in monitoring open system activity at Tungurahua volcano.* IAVCEI Scientific Assembly 2013, Kagoshima (Japan); 07/2013

Benjamin Bernard, Bridget Wade, Silvana Hidalgo, Jorge Bustillos: *Quantification of tephra deposits from Tungurahua 2011 -2013 eruption, Ecuador: implication on the evolution of a long-lasting eruption.* IAVCEI Scientific Assembly 2013, Kagoshima (Japan); 07/2013

Benjamin Bernard, Claude Robin, Silvana Hidalgo, Bernardo Beate, Jenny Quijozaca: *The 3640-3510 BC eruption of Chachimbiro volcanic complex, Ecuador: a violent directed blast produced by a satellite dome.* IAVCEI Scientific Assembly 2013, Kagoshima (Japan); 07/2013

Brendan McCormick, Michael Herzog, Jian Yang, Marie Edmonds, Tamsin Mather, Simon Carn, Silvana Hidalgo, Baerbel Langmann: *An integrated study of SO₂ degassing from Tungurahua volcano, Ecuador.* AGU Fall Meeting 2012; 12/2012

Benjamin Bernard, Claude Robin, Bernardo Beate, Silvana Hidalgo: *Nuevo modelo evolutivo y actividad reciente del volcán Chachimbiro.* 7mas Jornadas en Ciencias de la Tierra, Escuela Politécnica Nacional, Quito, Ecuador; 11/2011

Gustavo Garzon, Bo Galle, Ulrich Platt, Michel Van Roozendaal, Clive Oppenheimer, Thor Hansteen, Georges Boudon, Mike Burton, Hugo Delgado, Angelica Muñoz, Eliecer Duarte, Demetrio Escobar, Mahinda Kasereka, Mario Molina, Simon Carn, Silvana Hidalgo, Eddy Sánchez, Salvatore Inguaggiato: *Present status and Results of NOVAC.* Fourth GAC Conference on Atmospheric Science, Gothenburg, Sweden; 05/2010

S. Hidalgo, M. C. Gerbe, H. Martin, P. Samaniego: *Constraining slab input into magma sources of Ecuadorian magmatism by oxygen isotopes data.* AGU Fall Meeting Abstracts; 12/2009

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