

Sébastien Biass

PERSONAL INFORMATION

Place and date of birth : Geneva, Switzerland, 3rd of February 1984
Nationality : Swiss / French
Address : 7, rue Chandieu, CH-1202 Geneva, Switzerland
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Affiliation : Department of Mineralogy, University of Geneva
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RESEARCH INTERESTS

Study of the Earth, field volcanology, hazard assessment, risk assessment, emergency management, education, numerical modelling

ACTUAL POSITION

PhD Student, Group of Volcanology and Geological Risks, Department of Mineralogy, University of Geneva, Switzerland

EDUCATION

University of Geneva, Switzerland

2010 | *CERG training program* – Specialization certificate for the assessment and management of geological and climate-related risk, including a personal research project on hazard, vulnerability and risk assessment for tephra fallout for Coto-paxi volcano, Ecuador.

2007-2009 | *Master in Mineralogy*
Physical volcanology and volcanic risks, under the supervision of Costanza Bonadonna

2008 | *ESRI online training modules for ArcGIS*

2004-2007 | *Bachelor in Geology*

University of Bristol, United Kingdom

2006-2007 | *ERASMUS*
3rd year of Bachelor degree abroad

WORK EXPERIENCE

University of Geneva, Switzerland

Since Nov 2009 | *Research assistant*
Development of a Matlab toolbox for probabilistic assessment of tephra fallouts
Occasionally assisting and teaching physical volcanology and volcanic risks

2008-2009 | *Lab assistant*
Preparation of rock samples for various types of analysis

UNITAR/UNOSAT, United Nations Organization, Geneva, Switzerland

Summer 2009 | *Intern*
Development of a method for vulnerability assessment for tephra fallout using satellite images and free and easily-accessible GIS data
Assisting UNOSAT in rapid mapping activities

University of Bristol, United Kingdom

Aug 2007	<i>Lab assistant</i> Study of the dynamics of buoyancy-driven plumes through analogue lab experiments
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| PUBLICATIONS | <p>Biass S., Bonadonna C. (2012), A fast GIS-based risk assessment for tephra fallout : the example of Cotopaxi volcano, Ecuador - Part I : probabilistic hazard assessment, <i>Natural Hazards</i></p> <p>Biass S., Frischknecht C., Bonadonna C. (2012) A fast GIS-based risk assessment for tephra fallout : the example of Cotopaxi volcano, Ecuador - Part II : vulnerability and risk assessment, <i>Natural Hazards</i> 64(1)</p> <p>Biass S., Bonadonna C. (2011), A quantitative assessment of eruptive parameters derived from tephra deposits : the example of two large eruptions of Cotopaxi volcano, Ecuador, <i>Bulletin of Volcanology</i> 73(1) :73–90</p> |
| PAPERS IN PREPARATION | <p>Biass S., Parmigiani A., Bonadonna C. TephRANDO : A Matlab toolbox for hazard assessment of tephra accumulation</p> <p>Biass S., Scaini C., Bonadonna C., Smith K., Folch A., Hoskuldsson A., Galderisi A. A multi-scale risk assessment for tephra fallout and airborne concentration from multiple Icelandic volcanoes - Part I : hazard assessment</p> <p>Scaini C., Biass S., Galderisi A., Bonadonna C., Smith K., Folch A., Hoskuldsson A. A multi-scale risk assessment for tephra fallout and airborne concentration from multiple Icelandic volcanoes - Part II : vulnerability and impact assessment</p> <p>Sandri L., Thouret J.C., Constantinescu R., Biass S., Tonini R. Long-term multi-hazard assessment for El Misti volcano (Peru)</p> |
| CONFERENCE CONTRIBUTIONS | <p>Biass S., Bonadonna C., di Traglia F., Rosi M., Gregg C. (2012), Risk assessment associated with tephra accumulation : the example of Vulcano Island, Italy. MIAVITA final workshop, Stuttgart, Germany</p> <p>Biass S., Frischknecht C., Bonadonna C. (2012), A large scale and open source approach to the risk related to tephra fallout : a case-study at Cotopaxi volcano, Ecuador. MIAVITA final workshop, Stuttgart, Germany</p> <p>Biass S., Parmigiani A., Bonadonna C. (2010), TephRANDO : a tool for hazard assessment of tephra accumulation. Cities on Volcanoes 6, Tenerife, Spain.</p> <p>Biass S., Frischknecht C., DellOro L., Senegas O., Bonadonna C. (2010), A fast and comprehensive risk assessment for tephra accumulation using easily accessible data : the example of Cotopaxi volcano (Ecuador). Cities on Volcanoes 6, Tenerife, Spain.</p> <p>Biass S., Frischknecht C., DellOro L., Senegas O., Bonadonna C. (2010), A comprehensive risk assessment for tephra accumulation using easily accessible data : the example of Cotopaxi volcano (Ecuador). European Geosciences Union (EGU), Vienna, Austria.</p> <p>Bonadonna C., Volentik A., Smith K.T., Biass S., Costa A., Connor C.B. (2009), Behind a database : the characterization of explosive eruptions. AGU Fall Meeting, San Francisco, USA.</p> |

Biass S., Parmigiani A., DellOro L., Senegas O., Bonadonna C. (2009), Exposure-based risk assessment for volcanic ash : the example of Cotopaxi volcano, Ecuador. Swiss Geoscience Meeting, Neuchâtel, Switzerland.

Biass S., Bonadonna C., Costantini L., Tsunematsu K. (2008), Assessing variations of eruptive parameters by using different field techniques. International Association of Volcanology and Chemistry of the Earth's Interior (IAVCEI) General Assembly, Reykjavik, Iceland.

OTHER DIPLOMAS	2004	<i>Jeunesse et Sports</i> (J+S II) Swiss federal diploma of tennis instructor
	2002	<i>Private Pilot License</i> (PPL) European airplane private pilot license
	1999-2002	<i>Deutsche Schule</i> , Geneva, Switzerland
COMPUTER SKILLS	Advanced	Matlab, ArcGIS, Adobe Photoshop & Illustrator, Microsoft Office, Mac OS, Unix/Linux, Windows
	Intermediate	LaTeX, Adobe Flash, 3D Studio Max Programming in HTML, PHP, MySQL
	Basic	Programming in Shell, Perl, Java, VBA
LANGUAGES	French	Native speaker
	English	Fluent
	German	Conversational
	Spanish	Beginner
INTERESTS AND ACTIVITIES	Learning, science, outdoor activities, travelling, sport, music, arts, culture, nature, new technologies	