

ISI Web of Science peer reviewed publications - Scientific associated to observatories
Observatoires Volcanologiques et Sismologiques (OVS) of IPGP (OVSM+OVPF+OVSG)
Service National d'observations en volcanologie - OVS data

2012-2017

1. Allard P, Aiuppa A, Beauducel F, Gaudin D, Di Napoli R, Calabrese S, Parello F, Crispi O, Hammouya G, Tamburello G (2014) Steam and gas emission rate from La Soufriere volcano, Guadeloupe (Lesser Antilles): Implications for the magmatic supply during degassing unrest. *Chemical Geology* 384:76-93
2. Beck C, Reyss JL, Leclerc F, Moreno E, Feuillet N, Barrier L, Beauducel F, Boudon G, Clement V, Deplus C, Gallou N, Lebrun JF, Le Friant A, Necessian A, Paterne M, Pichot T, Vidal C (2012) Identification of deep subaqueous co- seismic scarps through specific coeval sedimentation in Lesser Antilles: implication for seismic hazard. *Natural Hazards and Earth System Sciences* 12(5):1755-1767
3. Brenguier F, Kowalski P, Staudacher T, Ferrazzini V, Lauret F, Boissier P, Catherine P, Lemarchand A, Pequegnat C, Meric O, Pardo C, Peltier A, Tait S, Shapiro NM, Campillo M, Di Muro A (2012) First Results from the UnderVolc High Resolution Seismic and GPS Network Deployed on Piton de la Fournaise Volcano. *Seismological Research Letters* 83(1):97-102
4. Brothelande E, Finizola A, Peltier A, Delcher E, Komorowski JC, Di Gangi F, Borgogno G, Passarella M, Trovato C, Legendre Y (2014) Fluid circulation pattern inside La Soufriere volcano (Guadeloupe) inferred from combined electrical resistivity tomography, self-potential, soil temperature and diffuse degassing measurements. *Journal of Volcanology and Geothermal Research* 288:105-122
5. Brunet M, Le Friant A, Boudon G, Lafuerza S, Talling P, Hornbach M, Ishizuka O, Lebas E, Guyard H, Party IES (2016) Composition, geometry, and emplacement dynamics of a large volcanic island landslide offshore Martinique: From volcano flank-collapse to seafloor sediment failure? *Geochemistry Geophysics Geosystems* 17(3):699-724
6. Brunet M, Moretti L, Le Friant A, Mangeney A, Nieto EDF, Bouchut F (2017) Numerical simulation of the 30-45 ka debris avalanche flow of Montagne Pelee volcano, Martinique: from volcano flank collapse to submarine emplacement. *Natural Hazards* 87(2):1189-1222
7. Carazzo G, Tait S, Kaminski E, Gardner JE (2012) The recent Plinian explosive activity of Mt. Pelee volcano (Lesser Antilles): The P1 AD 1300 eruption. *Bulletin of Volcanology* 74(9):2187-2203
8. Cayol V, Catry T, Michon L, Chaput M, Famin V, Bodart O, Froger JL, Romagnoli C (2014) Sheared sheet intrusions as mechanism for lateral flank displacement on basaltic volcanoes: Applications to Reunion Island volcanoes. *Journal of Geophysical Research-Solid Earth* 119(10):7607-7635
9. Costa A, Suzuki YJ, Cerminara M, Devenish BJ, Ongaro TE, Herzog M, Van Eaton AR, Denby LC, Bursik M, Vitturi MD, Engwell S, Neri A, Barsotti S, Folch A, Macedonio G, Girault F, Carazzo G, Tait S, Kaminski E, Mastin LG, Woodhouse MJ, Phillips JC, Hogg AJ, Degruyter W, Bonadonna C (2016) Results of the eruptive column model inter-comparison study. *Journal of Volcanology and Geothermal Research* 326:2-25
10. Di Muro A, Metrich N, Vergani D, Rosi M, Armienti P, Fougereux T, Deloule E, Arienzo I, Civetta L (2014) The Shallow Plumbing System of Piton de la Fournaise Volcano (La Reunion Island, Indian Ocean) Revealed by the Major 2007 Caldera-Forming Eruption. *Journal of Petrology* 55(7):1287-1315
11. Fontaine FR, Roult G, Michon L, Barruol G, Di Muro A (2014) The 2007 eruptions and caldera collapse of the Piton de la Fournaise volcano (La Reunion Island) from tilt analysis at a single very broadband seismic station. *Geophysical Research Letters* 41(8):2803-2811
12. Froger JL, Famin V, Cayol V, Augier A, Michon L, Lenat JF (2015) Time- dependent displacements during and after the April 2007 eruption of Piton de la Fournaise, revealed by interferometric data. *Journal of Volcanology and Geothermal Research* 296:55-68
13. Rivé K, Gaillardet J, Agrinier P, Rad S (2013) Carbon isotopes in the rivers from the Lesser Antilles: origin of the carbonic acid consumed by weathering reactions in the Lesser Antilles. *Earth Surface Processes and Landforms* , 38, 1020-1035
14. Girault F, Carazzo G, Tait S, Kaminski E (2016) Combined effects of total grain- size distribution and crosswind on the rise of eruptive volcanic columns. *Journal of Volcanology and Geothermal Research*

326:103-113

15. Jean-Baptiste P, Allard P, Fourre E, Parello F, Aiuppa A (2014) Helium isotope systematics of volcanic gases and thermal waters of Guadeloupe Island, Lesser Antilles. *Journal of Volcanology and Geothermal Research* 283:66-72
16. Jourde K, Gibert D, Marteau J, d'Ars JD, Komorowski JC (2016) Muon dynamic radiography of density changes induced by hydrothermal activity at the La Soufriere of Guadeloupe volcano. *Scientific Reports* 6, 33406, DOI:10.1038/srep33406
17. Leclerc F, Feuillet N, Cabioch G, Deplus C, Lebrun JF, Bazin S, Beauducel F, Boudon G, LeFriant A, De Min L, Melezan D, Party BCS (2014) The Holocene drowned reef of Les Saintes plateau as witness of a long-term tectonic subsidence along the Lesser Antilles volcanic arc in Guadeloupe. *Marine Geology* 355:115-135
18. Lesparre N, Gibert D, Marteau J, Komorowski JC, Nicollin F, Coutant O (2012) Density muon radiography of La Soufriere of Guadeloupe volcano: comparison with geological, electrical resistivity and gravity data. *Geophysical Journal International* 190(2):1008-1019
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20. Li L, Bonifacie M, Aubaud C, Crispi O, Dessert C, Agrinier P (2015) Chlorine isotopes of thermal springs in arc volcanoes for tracing shallow magmatic activity. *Earth and Planetary Science Letters* 413:101-110
21. Liuzzo M, Di Muro A, Giudice G, Michon L, Ferrazzini V, Gurrieri S (2015) New evidence of CO₂ soil degassing anomalies on Piton de la Fournaise volcano and the link with volcano tectonic structures. *Geochemistry Geophysics Geosystems* 16(12):4388-4404
22. Lomax A, Satriano C, Vassallo M (2012) Automatic Picker Developments and Optimization: FilterPicker-a Robust, Broadband Picker for Real-Time Seismic Monitoring and Earthquake Early Warning. *Seismological Research Letters* 83(3):531-540
23. Michon L, Di Muro A, Villeneuve N, Saint-Marc C, Fadda P, Manta F (2013) Explosive activity of the summit cone of Piton de la Fournaise volcano (La Reunion island): A historical and geological review. *Journal of Volcanology and Geothermal Research* 264:117-133
24. Michon L, Ferrazzini V, Di Muro A, Villeneuve N, Famin V (2015) Rift zones and magma plumbing system of Piton de la Fournaise volcano: How do they differ from Hawaii and Etna? *Journal of Volcanology and Geothermal Research* 303:112-129
25. Ort MH, Di Muro A, Michon L, Bachelery P (2016) Explosive eruptions from the interaction of magmatic and hydrothermal systems during flank extension: the Bellecombe Tephra of Piton de La Fournaise (La Reunion Island). *Bulletin of Volcanology* 78(1)
26. Rive K, Gaillardet J, Agrinier P, Rad S (2013) Carbon isotopes in the rivers from the Lesser Antilles: origin of the carbonic acid consumed by weathering reactions in the Lesser Antilles. *Earth Surface Processes and Landforms* 38(9):1020-1035
27. Rosas-Carbajal M, Komorowski JC, Nicollin F, Gibert D (2016) Volcano electrical tomography unveils edifice collapse hazard linked to hydrothermal system structure and dynamics. *Scientific Reports* 6, 28999, doi:10.1038/srep29899
28. Ruzie L, Aubaud C, Moreira M, Agrinier P, Dessert C, Greau C, Crispi O (2013) Carbon and helium isotopes in thermal springs of La Soufriere volcano (Guadeloupe, Lesser Antilles): Implications for volcanological monitoring. *Chemical Geology* 359:70-80
29. Saint-Ange F, Bachelery P, Babonneau N, Michon L, Jorry SJ (2013) Volcaniclastic sedimentation on the submarine slopes of a basaltic hotspot volcano: Piton de la Fournaise volcano (La Reunion Island, Indian Ocean). *Marine Geology* 337:35-52
30. Trofimovs J, Talling PJ, Fisher JK, Hart MB, Sparks RSJ, Watt SFL, Cassidy M, Smart CW, Le Friant A, Moreton SG, Leng MJ (2013) Timing, origin and emplacement dynamics of mass flows offshore of SE Montserrat in the last 110 ka: Implications for landslide and tsunami hazards, eruption history, and volcanic island evolution. *Geochemistry Geophysics Geosystems* 14(2):385-406
31. Vassallo M, Satriano C, Lomax A (2012) Automatic Picker Developments and Optimization: A Strategy for

Improving the Performances of Automatic Phase Pickers. *Seismological Research Letters* 83(3):541-554

32. Villemant B, Komorowski JC, Dessert C, Michel A, Crispi O, Hammouya G, Beauducel F, De Chabalièr JB (2014) Evidence for a new shallow magma intrusion at La Soufrière of Guadeloupe (Lesser Antilles) Insights from long- term geochemical monitoring of halogen-rich hydrothermal fluids. *Journal of Volcanology and Geothermal Research* 285:247-277
33. Watt SFL, Talling PJ, Vardy ME, Heller V, Huhnerbach V, Urlaub M, Sarkar S, Masson DG, Henstock TJ, Minshull TA, Paulatto M, Le Friant A, Lebas E, Berndt C, Crutchley GJ, Karstens J, Stinton AJ, Maeno F (2012) Combinations of volcanic-flank and seafloor-sediment failure offshore Montserrat, and their implications for tsunami generation. *Earth and Planetary Science Letters* 319:228-240