

Abbreviated CV

Benoit Taisne

Current Positions

Assistant Professor Asian School of the Environment, Nanyang Technological University, Singapore
Principal Investigator, Earth Observatory of Singapore, Nanyang Technological University, Singapore

Education:

2004-2008 Ph.D. in geophysics (with distinction) on the "Vicissitudes of ascending magma through the terrestrial crust".
Directors : Pr. C. Jaupart and Pr. S. Tait, Institut de Physique du Globe de Paris, CNRS
2001-2004 M.Sc (with distinction), Ecole Normale Supérieure de Paris
2003-2004 M.Sc (with distinction), Institut de Physique du Globe de Paris
2002-2003 M.Sc (with distinction), Ecole Normale Supérieure de Paris, Université Pierre et Marie Curie
2001-2002 BSc Earth sciences (with distinction), Ecole Normale Supérieure de Paris, Université Pierre et Marie Curie

Past professional experience:

2010-2012 Postdoctoral researcher at the Montserrat Volcano Observatory, IPGP. Study of the lava dome stability.
2008-2010 PostDoctoral researcher, Seismological laboratory at the Institut de Physique du Globe de Paris (with N. Shapiro). Modelling of the seismic activity linked to dyke propagation.
2009 Seismologist at the Montserrat Volcano Observatory, IPGP
2007 Volcanological monitoring at the Piton de la Fournaise Observatory. Quantitative analysis of seismic signal.
2005 GPS measurements in Jordan. Measurements for Dead Sea fault studies.
2004 Graduate Research Project in volcanology at the Institut de Physique du Globe de Paris (Advisor Pr. C. Jaupart).
Subject : Gas precursory to volcanic eruption.
2003 Graduate Research Project in volcanology at the Bristol University, UK (with Pr. S. Sparks, Dr. J. Phillips). Subject :
Mingling of two magmas in different geometrical configurations.
2002 Undergraduate Research Project in volcanology at the Institut de Physique du Globe de Paris (Advisor Pr. C. Jaupart). Subject : Study of the mechanics for intermittent lava dome growth
2001 Undergraduate Research Project in volcanology at La Reunion Island (Advisors Pr. P. Bachelery, M. P. Mairine).
Subject : Mapping volcanological risk within the Plaine des Cafres.

Professional Activities:

Member of the American Geophysical Union
Member of the European Geophysical Union

Top publications

- Rivalta, E Taisne, B Bungler, AP Katz RF (2015) A review of mechanical models of dike propagation: Schools of thought, results and future directions *Tectonophysics* 638, 1-42
- Taisne, B Jaupart C (2009) Dike propagation through layered rocks *Journal of Geophysical Research: Solid Earth* 114
- Roult, G Peltier, A Taisne, B Staudacher, T Ferrazzini, V Di Muro A and others (2012) A new comprehensive classification of the Piton de la Fournaise activity spanning the 1985–2010 period. Search and analysis of short-term precursors ... *Journal of Volcanology and Geothermal Research* 241, 78-10
- Taisne, B Brenguier, F Shapiro, NM Ferrazzini V (2011) Imaging the dynamics of magma propagation using radiated seismic intensity *Geophysical Research Letters* 38 (4)
- Taisne, B Tait, S Jaupart C (2011) Conditions for the arrest of a vertical propagating dyke. *Bulletin of Volcanology* 73 (2), 191-204
- Taisne, B Tait S (2011) Effect of solidification on a propagating dike *Journal of Geophysical Research: Solid Earth* 116 (B)
- Taisne, B Tait S (2009) Eruption versus intrusion? Arrest of propagation of constant volume, buoyant, liquid-filled cracks in an elastic, brittle host *Journal of Geophysical Research: Solid Earth* 114 (B6)