

List of Publications

Elodie Brothelande

Published Articles (peer-reviewed journals)

- Brothelande**, E., Amelung, F., Yunjun, Z., Wdowinski, S., 2018. Geodetic evidence for interconnectivity between Aira and Kirishima magmatic systems, Japan. *Scientific reports*, 8(1), 9811.
- Gaudin, D., Ricci, T., Finizola, A., Delcher, E., Alparone, S., Barde-Cabusson, S., **Brothelande**, E., et al., 2017. Heat flux-based strategies for the thermal monitoring of sub-fumarolic areas: Examples from Vulcano and La Soufrière de Guadeloupe. *Journal of Volcanology and Geothermal Research*, 343, 122-134.
- Pucci, S., Civico, R., Villani, F., Ricci, T., Delcher, E., Finizola, A., Sapia, V., De Martini, P. M., Pantosti, D., Barde-Cabusson, S., **Brothelande**, E., Gusset, R., et al., 2016. Deep electrical resistivity tomography along the tectonically active Middle Aterno Valley (2009 L'Aquila earthquake area, central Italy). *Geophysical Journal International*.
- Famin, V., Berthod, C., Michon, L., Eycheenne, J., **Brothelande**, E., Mahabot, M., Chaput, M., 2016. Localization of magma injections, hydrothermal alteration, and deformation in a volcanic detachment (Piton des Neiges, La Réunion). *Journal of Geodynamics*.
- Brothelande**, E., Peltier, A., Got, J.-L., Merle, O., Lardy, M., Garaebiti, E., 2016. Constraints on the source of resurgent doming inferred from analogue and numerical modeling – implications on the current feeding system of the Yenkahe dome–Yasur volcano complex (Vanuatu). *Journal of Volcanology and Geothermal Research*, special issue on Vanuatu volcanoes.
- Brothelande**, E., Lénat, J.-F., Chaput, M., Gailler, L., Finizola, A., et al., 2016. Structure and evolution of an active resurgent dome evidenced by geophysical investigations: the Yenkahe dome-Yasur volcano system (Siwi caldera, Vanuatu). *Journal of Volcanology and Geothermal Research*, special issue on Vanuatu volcanoes.
- Brothelande**, E., Lénat, J.-F., Normier, A., Bacri, C., Paris, R., Kelfoun, K., et al., 2016. Insights on the evolution of the Yenkahe resurgent dome (Siwi caldera, Tanna Island, Vanuatu) inferred from aerial high-resolution photogrammetry. *Journal of Volcanology and Geothermal Research*, special issue on Vanuatu volcanoes.
- Gaudin, D., Finizola, A., Delcher, E., Beauducel, F., Allemand, P., Delacourt, C., **Brothelande**, E., Peltier, A., 2015. Seasonal variations of the heat and steam fluxes in fumarolic zones: the example of the Ty Fault (Guadeloupe, Lesser Antilles). *Journal of Volcanology and Geothermal Research*, 302, 273-285.
- Brothelande**, E., and Merle, O., 2015. Estimation of magma depth for resurgent domes: an experimental approach. *Earth and Planetary Science Letters*, 412, 143-151.
- Brothelande**, E., Finizola, A., Peltier, A., Delcher, E., Komoroski, J.-C., et al., 2014. Fluid circulation pattern inside La Soufrière volcano (Guadeloupe) combining electrical resistivity tomography, self-potential, soil temperature and diffuse degassing measurements. *Journal of Volcanology and Geothermal Research*, 288, 105-122.

- Merle, O., **Brothelande**, E., Lénat, J. F., Bachèlery, P., Garaébiti, E., 2013. A structural outline of the Yenkahe volcanic resurgent dome (Tanna Island, Vanuatu Arc, South Pacific). *Journal of Volcanology and Geothermal Research*, 268, 64-72.
- Peltier, A., Finizola, A., Douillet, G. A., **Brothelande**, E., Garaebiti, E., 2012. Structure of an active volcano associated with a resurgent block inferred from thermal mapping: The Yasur–Yenkahe volcanic complex (Vanuatu). *Journal of Volcanology and Geothermal Research*, 243, 59-68.

Articles in preparation

- Brothelande**, E., Acocella, V., in preparation for *Bulletin of Volcanology*. Caldera resurgence: a review.

Conference papers

- Brothelande**, E., Amelung, F., Wdowinski, S., et al., 2017. Volcano interactions and coupling: insights from Japan and Galapagos. *AGU Fall Meeting 2017. (Poster)*
- Brothelande**, E., Amelung, F., Yunjun, Z., 2016. Interactions and interconnectivity of neighboring volcanic systems in southern Japan. *AGU Fall Meeting 2016. (Poster)*
- Finizola, A., Ricci, T., Antoine, R., Delcher, E., Peltier, A., Bernard, J., **Brothelande**, E. et al., 2016. The summit part of Mount Etna revealed by High Resolution DC Electrical Resistivity Tomography coupled with complementary geophysical and soil gas techniques. *EGU Gen. Ass. 2016. (Poster)*
- Brothelande**, E., Merle, O., 2014. Insights into magma depth under resurgent domes from analogue modeling. *EGU Gen. Ass. 2014. (Invited oral presentation)*
- Douillet, G.A., Peltier, A., Finizola, A., **Brothelande**, E., Garaebiti, E., 2014. Thermal mapping: the hydrothermal system of a volcano used to map faults and palaeostructures within stratified ground. The Yasur-Yenkahe volcanic complex (Vanuatu). *EGU Gen. Ass. 2014. (Poster)*
- Gaudin, D., Finizola, F., Beauducel, F., **Brothelande**, E., et al., 2014. Heat flux measurement from vertical temperature profile and thermal infrared imagery in low-flux fumarolic zones. *EGU Gen. Ass. 2014. (Poster)*
- Brothelande**, E., Lénat, J.-F., et al., 2013. Caldera resurgence: new insights from the study of the Siwi-Yenkahe-Yasur system (Vanuatu). *AGU Fall Meeting 2013. (Poster)*
- Brothelande**, E., Lénat, J.-F., Merle, O., Peltier, A., 2012. Active resurgence at Siwi caldera (Vanuatu): new insights on the structure and activity of the Yenkahe horst. *4th international workshop on collapse calderas (IAVCEI) 2012. (Oral presentation)*
- Finizola, A., **Brothelande**, E., Peltier, A., Delcher, E., et al., 2011. Imaging hydrothermal circulations associated to active fractures at La Soufrière (Guadeloupe): new insights from combined electrical resistivity tomography, self-potential, soil temperature and gas measurements. *Carib. Geol. Int. Conf. 2011. (Poster)*
- Brothelande**, E., Saunders, K., Barton, S., Martin, S., Baker, J., Wysoczanski, R., 2008. Pyroxene residence times from Mt. Ngauruhoe and Mt. Taranaki. *GSNZ Annual Conf. 2008. (Poster)*