# Jamie I. FARQUHARSON

/'dʒeimi 'far(r)kəsən/

### Volcanologist



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/in/jamie-farquharson



jifarquharson



JI\_Farquharson

## Technical Skills —

Python • Jupyter Lab • MS Office

MATLAB • R • CSS

## Education -

PhD., Geophysics (Experimental Volcanology)

Exceptional
Université de Strasbourg
2013 - 2016 | Strasbourg, France

MSc., Volcanology and Geological Hazards

Distinction
Lancaster University
2012 - 2013 | Lancaster, UK

**BSc., Environmental Geography** 

First class with honours University of Stirling 2007 - 2011 | Stirling, UK

# **Q** Research experience

# April 2018 - **Post-doctoral research associate** Present

 Exploring the influence of external forces on the frequency and magnitude of volcanic eruptions

- Studying the propensity for rainfall-induced volcanic activity
- Applying experimental data to field-scale problems

#### Nov 2016 -April 2018

#### Post-doctoral research assistant

Université de Strasbourg, France

University of Miami, USA

- Experimental stimulation of geothermal reservoir rocks, under the DESTRESS Horizon-2020 framework.
- Investigating the evolution of the strength and fluid-flow properties of reservoir material during acid stimulation

#### Nov 2011 -Mar 2012

#### Research assistant

Universidad de Colima, Mexico

- Volunteer at Centro de Intercambio e Investigación en Vulcanología (Center for Exchange and Research in Volcanology)
- Collection and analysis of volcanic thermal data, digitisation of seismic events, and taking field gas measurements.
- Deployment and field testing of infrasound arrays, field-testing a range of geochemical, geothermal and geodesic equipment.

# Reviewing experience

Journal of Volcanology and Geothermal Research; Solid Earth; IEEE Transactions in Geoscience and Remote Sensing; Bulletin of Volcanology; Computers & Geosciences; Volcanica; Journal of Geophysical Research; Processes; Remote Sensing; Energies; Applied Sciences; Geophysical Journal International; G<sup>3</sup>; Mathematical Geosciences

## Gen access

I am a keen proponent of the idea that science and data should be openly accessible to everyone. I developed Volcanica, a diamond open-access volcanology journal, with this in mind. I serve as Editor-in-Chief, typesetter, and web developer. I also serve on the advisory council of EarthArXiv: a pre-print archive for Earth Sciences.

## Select publications

**Farquharson, J. I.**, & F. Amelung, 2020. Extreme rainfall triggered the 2018 rift eruption at Kīlauea Volcano. Nature. doi: 10.1038/s41586-020-2172-5

**Farquharson, J. I.**, B. Wild, A. R. L. Kushnir, M. J. Heap, P. Baud, & B. Kennedy, 2019. Acid-induced dissolution of andesite: evolution of permeability and strength. JGR: Solid Earth. doi: 10.1029/2018JB016130.

**Farquharson, J. I.**, & F.B. Wadsworth, 2018. Introducing Volcanica: The first diamond open-access journal for volcanology. Volcanica. doi: 10.30909/vol.01.01.i-ix.

**Farquharson, J. I.**, M. J. Heap, & P. Baud, 2016. Strain-induced permeability increase in volcanic rock. Geophys. Res. Lett.doi: 10.1002/2016GL071540.

**Farquharson, J. I.**, M. J. Heap, P. Baud, T. Reuschlé, & N. R. Varley, 2016. Pore pressure embrittlement in a volcanic edifice. Bull. Volcanol. doi: 10.1007/s00445-015-0997-9.

Farquharson, J. I., M. J. Heap, N. Varley, P. Baud, & T. Reuschlé, 2015. Permeability and porosity relationships of edifice-forming andesites: A combined field and laboratory study. J. Volcanol. Geoth. Res. doi: 10.1016/j.jvolgeores.2015.03.016.

Full list of publications available at jifarquharson.github.io/.