



Zoom lecture
Tuesday 19th November 2024

Volcano Collapse

Presented by Professor Hilary Downes FGS

Zoom opens at 6.45 p.m. and lecture starts at 7 p.m.

Organised by John Wong FGS
Home Counties North Regional Group Chair

Hosted by Adrian Marsh FGS

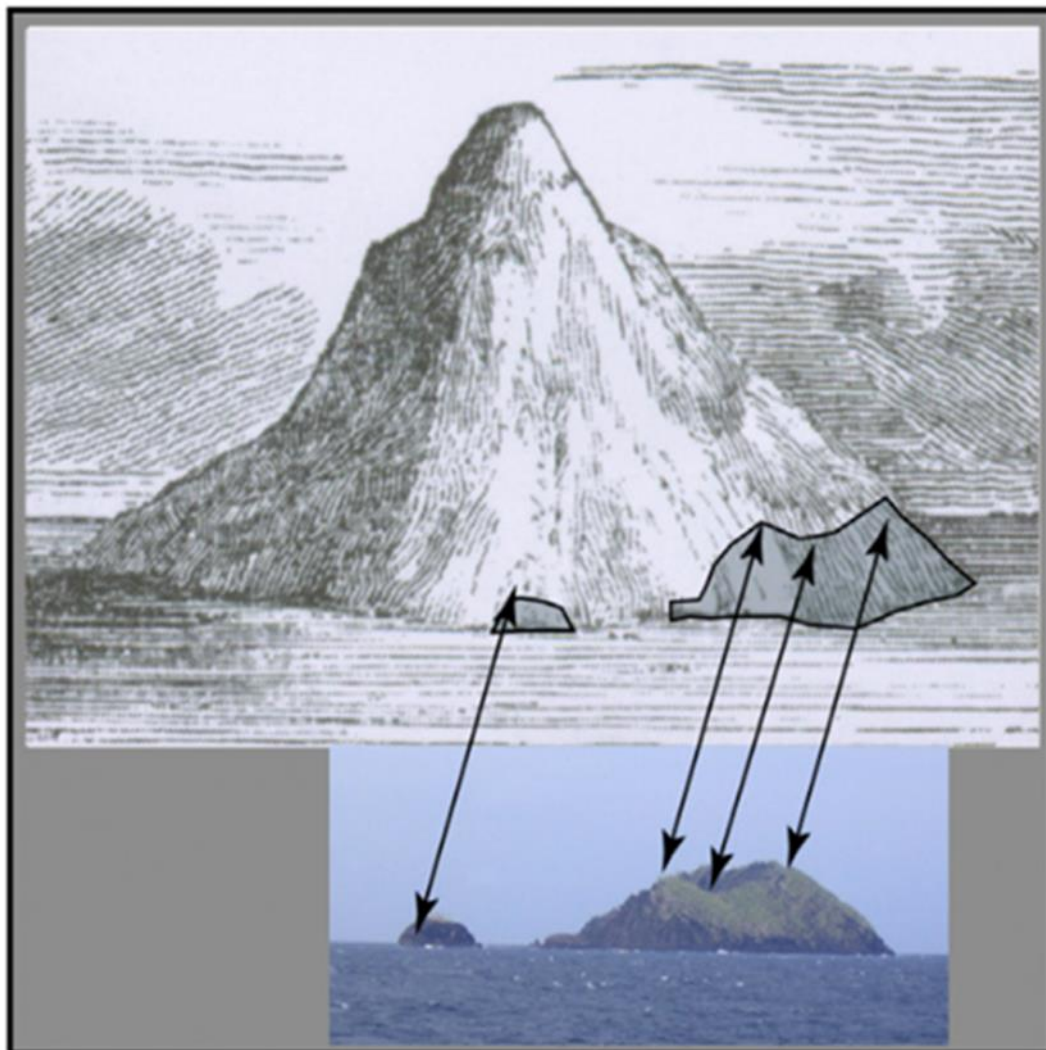
Lecture speaker Professor Hilary Downes FGS



I am a Professor of Geochemistry at Birkbeck, University of London, where I teach courses in igneous petrology and meteorites, and was also Head of Department for 9 years. I was President of the Mineralogical Society of Great Britain and Ireland for 3 years (2016-2019). My main research interests are in mantle xenoliths, alkaline magmatism and olivine-rich meteorites. I am also a Scientific Associate at the Natural History Museum in London. In this role, I am working on understanding the petrogenesis of highly undersaturated magmatism in the Cape Verde Islands using both cumulate xenoliths and erupted lavas. I have published more than 140 papers, on a wide variety of topics, and was awarded the Collins Medal of the Mineralogical Society in 2022.

Abstract

Volcano collapses are rare events on a human time-scale. There have been several small ($< 1 \text{ km}^3$) volcano collapses (e.g. Anak Krakatau and Stromboli) in recent years, producing locally destructive tsunamis. However, we have not yet seen a major volcano collapse, in which 10s-1000s of km^3 of material slides into the ocean. There is excellent evidence from onshore and submarine mapping that such collapses happen frequently on geological time-scales (10 000 to 100 000s of years). Such volcano collapses would cause major tsunamis which could carry destruction for 1000s of km. The talk will include work produced by students at UCL and Birkbeck on a variety of examples of volcano collapses from the South Pacific to the Canary Islands and Cape Verdes.



A "before and after" sketch of Ritter volcano.



Fogo volcano © Professor Hilary Downes



Fogo volcano © Professor Hilary Downes

This event is free of charge, but registration is essential, priority will be given to Fellows and Student Fellows of the Geological Society who are members of the Home Counties North Regional Group. Fellows and Student Fellows of all other Geological Society Regional Groups are welcome to register their places, also free of charge.

Please book your places on a first-come-first-served basis by e-mail to homecountiesnorthregionalgroup@gmail.com.

For more information on the Home Counties North Regional Group visit the website <http://www.geolsoc.org.uk/hcnrg>

CPD (Continuing Professional Development) hours – This Home Counties North Regional Group event qualifies for your CPD hours spent travelling to/from and attending the event. The content is intended to be suitable for early career through to experienced geologists and related professionals.

Geological Society, Burlington House, Piccadilly, London, W1J OBG
Tel: +44 (0)20 7434 9944 Fax: +44 (0)20 7439 8975
Email: enquiries@geolsoc.org.uk Web: www.geolsoc.org.uk

Registered Charity No. 210161

This event is supported by



and

