

Workshop

Human consequences of past volcanic-induced climatic shocks

10–13.6.2025 St Peter's Island, Switzerland



Large volcanic eruptions can have a substantial impact on climate across the globe. These climatic disturbances can, in turn, have severe human consequences – often very remote from the original eruption. To understand how such eruptions have impacted history (and may impact society in the future) we need to understand how eruptions, climate and society interact. Recent research has done much to clarify the climatic effects of volcanic activity, particularly relating to summer temperatures, while winter temperatures and the impact of multiple eruptions are the subject of ongoing research. Less well understood (or perhaps less agreed upon) is how human societies interact with such volcanic climate change. Many studies have identified the coincidence of eruption events and human calamities, but often the extent of causality has been less clear. This has left many questions still to be addressed: To what extent can we attribute social impacts to volcanic eruptions? How do different eruptions impact different societies and is there any consistency between these impacts? And why are some societies more or less affected by certain eruptions?

To address such questions, this workshop will bring together experts from many different disciplines, studying a variety of geographic regions. The aim is to generate a better understanding of volcano-climate-society interactions and help develop a more robust methodology for attributing social impacts to volcanic climate changes. Presentations, hands-on workshops and roundtable discussions will consider the geophysical evidence for past volcanic eruptions (which informs historical and climatological studies), historical case studies, and key questions relating to volcano-climate-society interactions. Outcomes will hopefully include a more general understanding of the historic impacts of volcanic eruptions and an improved knowledge of the different factors that mediate the impact climate change on human societies.

The workshop is organised by

Volcanic Impacts on Climate, Environment and society (VICES) group (Bern), [link](#)

In cooperation with

The Nordic Little Ice Age: Lessons from Past Climate Change (NORLIA) project (Oslo), [link](#)



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Centre for Advanced Study
at The Norwegian Academy of Science and Letters

Pre-conference programme

Monday 9.6.

As many of our international participants will arrive to Switzerland already on Monday, we will have some extra programme on Monday. We will meet approximately 18:30 at hotel [Ador](#), from where we will walk to the Old Town of Bern. During this walk, Niklaus Bartlome will guide us through the exiting history of the town. The tour ends in the restaurant [Altes Tramdepot](#), where we have a dinner (at own cost). You can also skip the tour (or travel parts of it by public transportation) and join us for the dinner.

18:30 Meeting at hotel Ador lobby

18:45-20:00 City tour (Niklaus Bartlome).

c. 20:00 Dinner, Altes Tramdepot

Tuesday 10.6.

The morning and early afternoon is free for you to explore Bern. Alternatively, we have booked a seminar room in Unitobler for pre-workshop discussions (this considers especially the Norwegian participants).

14:45 Meeting at hotel Ador lobby, walking to the train station

15:12 Train to La Neuveville, platform 49 (subject to change)

16:55 Arrival to St. Peter's Island

Workshop venue

The workshop will be held in a charming old priory on St. Peter's Island. We will meet on **Tuesday 10.6.2025** at La Neuveville, where we will take a ferry to the island. There are two ferry departures:

16:40 and **17:15**. Be there on time, as these are the last departures of the day! You will have to reserve between 2 and 2.5 hours if you are traveling from Zurich or Basel airport, or approximately 1 hour if you are traveling from Bern.

Note that pharmacies and other stores are not in close vicinity of the workshop venue. Thus **bring all medication** and other essential products you might need **with you**.



Academic programme

Tuesday 10.6.

16:00-16:30	Meeting at LaNeuveville, transportation to St. Peter's Island.
17:30-18:00	Welcome (Heli Huhtamaa, Niklaus Bartlome).
18:00-19:00	Icebreaker (Heli Huhtamaa, Richard Warren).
19:00	Dinner

Wednesday 11.6.

8:00-9:00	Breakfast
9:00-10:30	Session 1: Kirstin Krüger – Climate Modelling of LIA: focus on the 1690s and Laki. Ingar Mørkestøl Gundersen and Matias Kallevik – More than Laki. Social and climatic impacts from Icelandic volcanism in 1780's Scandinavia Zhen Yang – Volcanic eruptions, crop harvests and grain prices in Shandong Province, c. 1750-1850 CE
10:30-11:00	Break
11:00-12:00	Flash talks 1: Siyo Chen – Comparison of historical extreme events in China and central Europe and the role of volcanic eruption. Gautier Juret-Rafin – Building climate history through volcanic eruptions in Italy. Nicolas Maughan – Climatic and Societal Impacts of Volcanic Eruptions in France and French Overseas Territories for the Past 1,000 years : Current Knowledge and Future Directions
12:00-13:30	Lunch
13:30-14:30	Workshop 1: Jörg Franke – Detection and Attribution of Volcanic Signals in Climate Reconstructions.
14:30-15:00	Break
15:00-16:00	Session 2 : Will Hutchinson – Volcanic whodunnit: new methods to unravel the source and climate impact of past eruptions Bruce Campbell – Which environmental shocks had the biggest negative impacts on English national income?
16:00-16:30	Break
16:30-17:30	Flash talks 2: Dario Petri – Bad Omens: The Haze in German Newspapers 1780 - 1900. Richard Warren – From Fire to Famines? Asia and the impact of the 1831 & 1835 eruptions Niklaus Bartlome – 450 Years of Insular Viticulture: Attributing Extreme Harvest Events in a Micro Study.
18:30	Dinner
20:00	Sunset walk and talk

Academic programme

Thursday 12.6.

8:00-9:00	Breakfast	
9:00-10:30	Session 3:	Celeste Smith – Constraining the sources of the 1601 CE double sulfate peaks in the Greenland ice core record. Elena Xoplaki – TBA Francis Ludlow – Explosive Volcanism Drives Bumper Fish Catch in the North Atlantic, 1600-1900 CE.
10:30-11:00	Break	
11:00-12:00	Workshop 2:	Michael Sigl – Unlocking the frozen memories of Earth's volcanic past with ice cores
12:00-13:00	Lunch	
13:30-16:00	Excursion to Ligerz (Niklaus Bartlome)	
16:30-18:00	Session 4:	Sébastien Guillet – The night the Moon went missing: The Dark Lunar Eclipse of April 1642 and its Volcanic Origins. Eirik Ballo – Norway in the 1690s: Exploring the complex interplay between climate and epidemics. Katrin Kleemann – Human consequences of the Laki eruption
18:30-20:00	Dinner	
20:15-20:30	Introduction:	Clive Oppenheimer (remote) – Volcano Voices: from Ashes to Archives & Art
20:30-	Movie night	(After the movie night, Clive will join us online to answer some questions).

Friday 13.6.

8:00-9:30	Breakfast	
9:30-10:30	Session 5	Justine Chen – Volcanic Impacts on East Asian Climate: An Analysis Based on REACHES and ModE-RA Databases. Juerg Luterbacher – How can we learn from past large tropical volcanic eruptions for current discussions on geoengineering?
10:30-11:00	Break, help with filling the travel reimbursement forms	
11:00-12:00	Roundtable (chaired by Richard Warren).	
12:00-13:30	Lunch	
13:30-14:30	Final discussion.	
15:05	Boat to La Neuveville (also earlier and later departures possible).	

List of participants

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Sunset on the bank of Thames 26.11.1883, following the Krakatoa eruption