



Volcanoes and Human History: the Lake Albano Maar in Roman History and Mythology

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Interactions between humans and volcanoes are inevitable as both are part of and share the natural environment. Communities inhabiting volcanically active areas have developed many different ways of volcanic risk mitigation depending on their different cultures and beliefs. Notable recent volcanic disasters, such as that of Nevado del Ruiz in 1985, illustrate the challenge in developing such strategies in the present days, characterised on the one side by a much deeper understanding of volcanic phenomena in scientific terms and on the other side by the need of communicating strategic information over characteristic repose intervals of decades to centuries. Furthermore, the increasing population around volcanic fields exposes more people and property to the hazards of even small magnitude events. Many small magnitude volcanic events, and particularly inter-eruption events, such as phreatic, limnic or gas eruptions generally leave only very subtle traces in the geologic record, and are therefore largely disregarded in hazard analysis. For this reason it is essential to have a much better understanding of not only the volcanic behaviour associated with eruptions but also of those inter-eruption events, such as the disastrous limnic eruptions that produced deadly gas flows and lahars at Monoun crater lake in 1984, and at Nyos crater lake in 1986, with 37 and 1200 casualties respectively.

Only recently, however, interdisciplinary approaches that involve volcanology, archaeology, and anthropology have been combined with the explicit intent of addressing the impact of volcanic eruptions and related phenomena on human societies.

In this presentation we examine the case of the Roman area and the relationships of the history of human settlement and development with the latest events in the Colli Albani volcanic field and particularly from the Albano maar, which have been long debated in historical, archaeological and volcanological literature. The many archeologic studies of settlements as well as ancient literature sources offer an exceptional chance to increase our knowledge of the eruptive and inter-eruptive activity of the volcanic field and of its influence on the history of human settlement and technological development.