



## **Neapolitan volcanoes: an history of benefits and risk**

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Naples is the city of Yellow Tuff. Generated by a great eruption in the Campi Flegrei about 15,000 years ago, this deposit, which has taken on the consistency of a yellow-coloured rock, is the symbol of the city, and using it this city has fed its growth. The numerous quarries and tunnels present in the Neapolitan Yellow Tuff, which show stretches of geological history, were excavated to extract building materials that go to make up many of Naples' historic buildings. The city, overlooking the Gulf of the same name, has grown up between two active volcanic areas, one of these, the Campi Flegrei (last eruption 1538) and the Island of Ischia (1302) to the west and Vesuvius (1944) to the east. In this area, that today is very urbanized, the original character is still overwhelming, and geological history can be interpreted by reading the stratification of the rocks produced by volcanic eruptions. The attraction of humankind for volcanoes has ancient roots in Campania. From the Bronze Age, the first villages were built on the slopes of Mount Vesuvius, while the Græco-Roman civilisation made these places, between Vesuvius, the Campi Flegrei and Ischia Island, their favourite destination for recreation and thermal baths. Part of this long history, lasting over 3,000 years, has been sealed in deposits of volcanic eruptions that have wrought major disasters, but have left an inheritance of inestimable historical, archaeological and volcanological value for posterity. During the last 70 years the Neapolitan volcanoes have lost their original identity, strongly characterised by geothermal manifestations, natural resources and landscapes and cultural tourism. The benefits of this active mountains have been progressively converted into risk. Although the potential of this area in terms of tourism, culture, scientific research and geothermal exploitation is still enormous, the volcanoes around Naples have been gradually erased in their natural sense. I report here some examples of the benefits of Neapolitan volcanoes through their long and complex history.