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The Plinian 'Pomici di Avellino' eruption of Vesuvius (Italy) and its impact on late Early Bronze Age settlements

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The unearthing in 1972, during the construction of a motorway NE of Naples (Italy), of more than 130 vases covered by products of the Vesuvian 'Pomici di Avellino' eruption revealed that 2000 years before Pompeii an extensive territory containing villages had been devastated by the volcano's fury. Although this discovery at Palma Campania, and those which followed (Roccarainola in 1976 and Avella in 1981), took place in circumstances which did not allow the most to be made of this exceptional phenomenon, the information obtained demonstrated the existence of – and dated – a previously unknown culture and indicated great archaeological potential. It is surprising that, in a region where the complex stratigraphy bears witness to repeated volcanic events, there had not been a precocious interest in proto-historic excavations. The importance of Greek and Roman sites meant that these more recent and spectacular epochs were privileged at the expense of evidence regarding older human settlement. The wealth of environmental and cultural detail furnished by numerous recent excavations, however, has greatly increased our understanding of this more distant past.

The Plinian Pomici di Avellino eruption had a powerful impact on the territory, devastating a huge area; the eruptive column laid down fall deposits of pumice and ash towards the NE, covering thousands of square kilometres in a few hours. Countless man-made features were sealed by this deposit, which was thickest in the direction of the town of Avellino. During the eruption's second phase many dilute, turbulent pyroclastic density currents were generated, affecting a large area to the N, W and NW of the volcano. The currents were distinguished by high emplacement temperatures (up to about 300 °C) and had considerable destructive force near the volcano; at greater distances, though, they merely covered buildings, causing damage largely due to the weight of accumulated material. The study and re-examination of excavations carried out in the Campanian Plain and the Apennines has yielded valuable information regarding the abandonment of and damage suffered by sites occupied when the eruption occurred. Recovery times varied greatly from one zone to another and demonstrate the severity of the eruption's effects on the human population and how these conditioned subsequent re-settlement.