## VOLCANOLOGICAL RECONSTRUCTION OF THE DEMAGE RECORDED IN THE VILLA OF AUGUSTUS (SOMMA VESUVIANA) DUE TO 472 AND MEDIEVAL ERUPTIONS OF VESUVIUS

A. M. Perrotta<sup>1</sup>, C. Scarpati<sup>1</sup>, G. Luongo<sup>1</sup>, M. Aoyagi<sup>2</sup>

A new excavation on the northern slope of Vesuvius has provided invaluable information on the late Roman Empire. A huge roman villa (tentatively attributed to the Emperor Augustus) has been found completely engulfed in the products of numerous explosive volcanic eruptions, which were separated by reworked material and paleosols. The basal part of the villa is buried by layers attributed to the 472 AD eruption. The stratigraphical evidence shows that the building was extensively damaged before the onset of the 472 AD eruption. As the building is attributed to the late Republican period it is possible to assume either that the 79 AD eruption did not affect the villa or that a thin layer of tephra accumulated in this area and was removed by the inhabitants who frequented the villa until the V century. The 472 AD sequence is covered by a thin, reddish paleosol, locally rich in shells of snails and fragments of walls, suggesting the existence of a brief period of quiescence after this eruption. Products of new eruptions, probably occurred during medieval age, covered completely the villa.

<sup>&</sup>lt;sup>1</sup>Dipartimento di Geofisica e Vulcanologia, Università di Napoli Federico II, Largo San Marcellino 10, 80138 Napoli, Italy

<sup>&</sup>lt;sup>2</sup>Graduate School of Humanities and Sociology, University of Tokyo, Japan