



New Archaeointensity data for Italy

M. J. Hill (1), P. Lanos (2) and A. Chauvin (3)

(1) Geomagnetism Laboratory, Dept. Earth and Ocean Sciences, University of Liverpool, UK, (2) CNRS, UMR 6566 'Civilisation Atlantique et Archeosciences', Universite Rennes 1, Rennes, France, (3) CNRS, UMR 6118 'Geosciences Rennes', Universite Rennes 1, Rennes, France (mimi@liv.ac.uk)

To date there are very few Italian archaeointensity results obtained from archaeological material. Here we present new results from two sites: a Roman Amphorae workshop, Albinia, Tuscany, and from a 7th Century BC site at Inconronata, Pisticci, Basilicata. At Albinia, samples were taken from five kilns and from the base of 39 amphorae. The types of amphorae found at the workshop date the site to being between 200 BC and 100 AD. At Inconronata samples were drilled from 39 bricks. A full suite of rock magnetic experiments were carried out which indicated the suitability of the samples for archaeointensity analyses. The original Thellier method along with anisotropy of TRM and cooling rate correction experiments were carried out in order to determine the ancient field intensity. The mean archaeointensity for each kiln and the amphorae at Albinia range from 62 to 70 microT compared to 85 +/- 5 microT obtained for the older bricks at Inconronata. This is consistent with the increase in field intensity seen going back through the first millennia BC in other regions such as Mesopotamia.