



Updated archaeointensity dataset from the SW Pacific

Mimi Hill (1), Andreas Nilsson (2), Richard Holme (1), Elliot Hurst (1), Gillian Turner (3), Andy Herries (4), and Peter Sheppard (5)

(1) Department of Earth, Ocean and Ecological Sciences, University of Liverpool, United Kingdom (mimi@liverpool.ac.uk), (2) Department of Geology, Lund University, Sweden, (3) School of Chemical and Physical Sciences, Victoria University of Wellington, New Zealand, (4) Department of Archaeology and History, LaTrobe University, Melbourne, Australia, (5) School of Social Sciences, University of Auckland, New Zealand

It is well known that there are far more archaeomagnetic data from the Northern Hemisphere than from the Southern. Here we present a compilation of archaeointensity data from the SW Pacific region covering the past 3000 years. The results have primarily been obtained from a collection of ceramics from the SW Pacific Islands including Fiji, Tonga, Papua New Guinea, New Caledonia and Vanuatu. In addition we present results obtained from heated clay balls from Australia. The microwave method has predominantly been used with a variety of experimental protocols including IZZI and Coe variants. Standard Thellier archaeointensity experiments using the IZZI protocol have also been carried out on selected samples. The dataset is compared to regional predictions from current global geomagnetic field models, and the influence of the new data on constraining the pfm9k family of global geomagnetic field models is explored.