Geophysical Research Abstracts, Vol. 8, 10136, 2006 SRef-ID: 1607-7962/gra/EGU06-A-10136 © European Geosciences Union 2006



New archaeomagnetic data from Austria and Germany

E. Schnepp (1), R. Scholger (1), H. Mauritsch (1), P. Lanos (2), C. Rolf (3)
(1) Paleomagnetic Laboratory Gams, Leoben, Austria, (2) Laboratoire d'Archéomagnétisme, Rennes, France, (3) GGA-Institut Arbeitsbereich Grubenhagen, Hannover, Germany (eschnepp@foni.net)

New archaeomagnetic results from 17 archaeological sites situated in Austria and Germany are presented. They represent archaeological ages from Mid Bronze age to the Mediaeval, of which some have been confirmed by radiocarbon or dendrochronological dating. In total about 60 individual structures have been investigated and the characteristic remanent magnetisation directions have been obtained using alternating field and thermal demagnetisation. In most cases the demagnetisation behaviour was stable and well defined mean archaeomagnetic direction could be obtained. The new Austrian data confirm the preliminary archaeomagnetic secular variation reference curve (Schnepp & Lanos, Geophys. J. Int., in revision). In the Bronze age the data are not very dense but they allow to present the first archaeomagnetic secular variation curve for Central Europe going back to about 2500 BC. Western declinations up to 60° have been found in two approximately contemporaneous sites from Northern Germany. They give evidence that a very quick and strong secular variation is observed around 800 BC.