



## **Comparing different methods of palaeointensity determination: a case study from the Datong volcanic province, China.**

**A. R. Muxworthy** (1), V. Ridley (1), L. Wang (2), Y. Pan (2) and L. Chang (3)

(1) Imperial College London ([adrian.muxworthy@imperial.ac.uk](mailto:adrian.muxworthy@imperial.ac.uk)), (2) Institute of Geology and Geophysics, Chinese Academy of Sciences (3) University of Southampton

We have collected palaeomagnetic cores from a sequence of five lava flows from the Datong volcanic province (DVP) in the Shanxi Province, China. We have conducted full-vector analysis using two different methods of palaeointensity determination. Firstly, we have undertaken a standard modified-Thellier investigation, and secondly we have measured the ancient intensity using the multi-specimen parallel differential pTRM method proposed recently by Dekkers and Böhnel (2006). In addition we have performed basic rock magnetic analysis to try to understand the difference between the two sets of results. Due to the high level of phenocrysts in the samples, it was not possible to date them using Ar/Ar, however, they are thought to be around 400 ka.

Dekkers, M.J. and Böhnel, H.N., 2006. Reliable absolute palaeointensities independent of magnetic domain state, *Earth Planet. Sci. Lett.*, 248, 507-516.