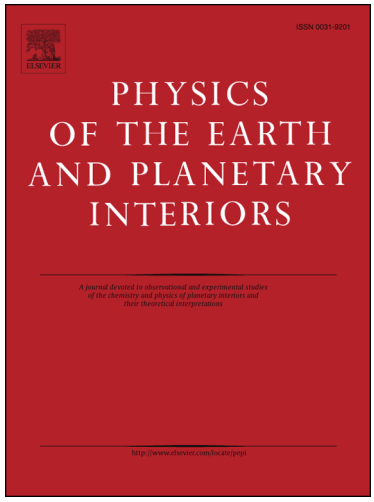

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Full-vector geomagnetic field records from the East Eifel, Germany

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abstract

To create meaningful models of the geomagnetic field, high-quality directional and intensity input data are needed. However, while it is fairly straightforward to obtain directional data, intensity data are much scarcer, especially for periods before the Holocene. Here, we present data from twelve flows (age range ~200 to ~470 ka) in the East Eifel volcanic field (Germany). These sites had been previously studied and are resampled to further test the recently proposed multi-method palaeointensity approach. Samples are first subjected to classic palaeomagnetic and rock magnetic analyses to optimise the subsequent palaeointensity experiments. Four different palaeointensity methods – IZZI-Thellier, the multispecimen method, calibrated pseudo-Thellier, and microwave-Thellier – are being used in the present study. The latter should be considered as supportive because only one or two specimens per site could be processed. Palaeointensities obtained for ten sites pass