

Paleointensity determinations of the Auckland excursion by the Shaw method with vacuum heating

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Shibuya et al.(1992) reported the geomagnetic excursion recorded in basaltic lavas from the Auckland volcanic field in New Zealand. Few paleointensity determinations for these lavas by the Thellier method or the Shaw method with double heating were successful because of heavy high-temperature oxidation in their magnetic minerals. To depress such oxidation, we have tried the Shaw method with vacuum heating together with the low temperature demagnetization. By this method, paleointensities for three samples in four were obtained: 11.4 $\pm$ 0.3 micro-T for Crater Hill and 10.2 micro-T for Wiri. These low values may indicate that the field strength during the Auckland excursion was one-fifth to one-sixth of the present field intensity.