

Paleointensities from the Auckland volcanics: new implications for the geomagnetic excursion

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We determined the paleointensities of 2-11 micro-T for the Auckland excursion (25-50ka), that is about one fifth of the present field intensity. These are the first reliable data of the geomagnetic excursion from the southern hemisphere. These low intensities are concordant with those of about 45ka excursions in the previous studies; 8 micro-T for Laschamp excursion in France and 4 micro-T for Skalamaelifell excursion in Iceland. Therefore the weak field is considered to be a common feature of the geomagnetic excursion. Mono Lake excursion in North America (about 28ka) also shows a weak field associated with a directional swing. This coincidence suggests that the geomagnetic field might be globally unstable during 25-29ka.