



Review of the recording and age of the Mono Lake Excursion

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Among the brief departures from gradual, long-term behaviour of the palaeomagnetic field in the Brunhes Normal Chron that reached opposite polarity or have a Virtual Geomagnetic Pole deep in the southern hemisphere, the first to be reported is the Laschamp Excursion (LE) in volcanic rocks in the Massif Central in France (Bonhommet and Zahringer, 1969). They originally believed it occurred between about 9,000 to 20,000 years before present, but it is now assigned an age of about 40,000 years B.P. (Guillou et al., 2004). Denham and Cox (1971) unsuccessfully sought the LE in exposed lake sediments that seemed to span that interval in the Mono Basin in the western Great Basin of the U.S., but instead encountered anomalous field behaviour that is called the Mono Lake Excursion (MLE)(Liddicoat and Coe, 1979). As a tribute to Norbert Bonhommet, who assisted us in our initial field work in the Mono Basin and shared a long-standing interest in the LE and MLE, we will review the palaeomagnetic behaviour and age of the MLE in the Mono Basin and elsewhere, for which there are nearly 20 reports of its occurrence globally, and evaluate the recent suggestion that the excursion at Mono Lake and the LE are the same.