

A New Palaeomagnetic record from the Voring Plateau, Norwegian Sea.

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A multidisciplinary study of a sediment core from the Voring Plateau displays a new record of Late Quaternary paleomagnetic changes. Natural remanent magnetisation (NRM) of continuous u-channel sample was measured before and after stepwise alternating field demagnetisation on a superconducting rock magnetometer at 1-cm resolution. NRM data reveal a stable and well-defined primary magnetisation. Component inclination data show negative inclination intervals that apparently coincide with the the Mono Lake, Laschamp, and possibly the Blake geomagnetic excursions. Chronology of the core was constrained through radiocarbon dating and a Cocolith biostratigraphy, in addition to correlations based on down-core elemental profiles. Tephra horizons have been identified and will be analysed for further tie points. Relative palaeointensity (RPI) record estimated by normalizing the NRM using anhysteretic remanent magnetisation, shows good correlation with other global RPI reconstructions, and display significant low values at the excursions identified by the directional data. According to our current age model, the mono lake excursion apparently spans from 26-32 ka BP, with a duration of about 6 kyr.