

Sedimentology and magnetostratigraphy of the Cretaceous formations in the Hamakoussou and Mayo Oulo-Lere basins in Northern Cameroon (Benue Trough)

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A magnetostratigraphic study has been carried out on a succession of fine-grained sediments in the upper part of each section. Palaeomagnetic samples subjected to progressive alternating field and thermal demagnetization show that the deposits preserve a primary magnetization. The directions of magnetization indicate a later regional tectonism marked by a rotation and block translation. Rock magnetic investigations reveal the presence of both high and low coercivity minerals. A sequence of three polarities was determined in the Hamakoussou basin: one reversed polarity and two normal polarities, whereas two polarities (normal and a reversal) were determined in the Mayo Oulo-Lere basin. The correlation between these polarities and the geomagnetic polarity time scale (GTS2004, GRADSTEIN et al., 2004) allowed us to attribute a Barremian age to these basins and to establish their chronology of formation.

GRADSTEIN, F. et al., 2004 (Eds.). A Geological Time Scale, Cambridge University Press.