



Paleomagnetic Secular Variation Patterns in Taiwan for the last seven thousands years

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This study presents the paleomagnetic secular variation patterns including paleo-declination, paleo-inclination and relative paleo-intensity in Taiwan for the last 7 kys. The record analyzed is from a marine sediment core of about 1.87 meter taken from offshore of eastern Taiwan near a volcanic islet. Based on six levels AMS ¹⁴C dating of the core analyzed from planktonic foraminiferal shells (>250 μm, >6 mg, Globigerinoides spp. and Orbulina universa), this core is proposed to provide the information for the last 7000 years. Single domain (SD) to fine-grained pseudo-single domain (PSD) magnetite is identified as the most important magnetic carrier.

The paleo-declinations of the samples varied about ±200 around their mean and their paleo-inclinations varied between 300 and 500 . The variation pattern of the paleo-declination is quite similar to that obtained from Japan reported by Hyoto et al. (1993). Relative paleo-intensity (RPI) shows an increased trend during 6500 yrB.P. to 3000 yrB.P., but decreased after. The RPI trend is very similar to that reported by Korte and Constable (2005) and shows the dominance of axial dipole behavior