

New Korean paleosecular variation curve during the past two millennia

Yong Hee Park
Korea, Republic Of (aegis@kangwon.ac.kr)

In order to better understand the paleosecular variation in the East Asia, a total of 144 archaeomagnetic directions have been collected and compiled from 75 and 69 independent kilns and baked hearths in South Korea and Southwest Japan, respectively. Examination of the data was performed to assess their quality and reliability in terms of the archaeomagnetic direction and the archaeological age. A new Korean palaeosecular variation (KPSV) curve has been constructed for the past 2,000 years using the moving window method and the Bayesian modeling. The KPSV curve shows a good agreement with the global geomagnetic field prediction model ARCH3k.1 rather than other global models (CALS3k.4 and SED3k.1). The KPSV data of this study would represent a new source of data for regional and global geomagnetic field modeling, as well as for archaeomagnetic dating in Korea.