



Archaeomagnetic SV curve for Belgium

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Archaeomagnetic secular variation curves have been established for different countries in Europe, especially when different archeological sites are more or less uniformly distributed in time are available. The disadvantage in that case is that data had to be relocated to a single reference site. The proximity of the reference locality Paris to Belgium makes that we used the French archaeomagnetic SV curve for the last three millennia up to the present for archaeomagnetic dating undated baked structures. In total, 85 baked structures have been examined, unearthed in 24 archaeological sites of the territory of Belgium. The ChRM of each sample was obtained by principal component analysis for at least three demagnetisation steps (Kirschvink 1980). Except for some outliers, the ChRM directions are very coherent with a high confidence factor ($\alpha_{95} < 5^\circ$) and high concentration factor. The average field directions recorded in the fired materials in most sites satisfy the international criteria used in archaeomagnetism. At present, only six baked structures were dated radiometrically and may be considered as reference data for a limited area about 30500 km² in Western Europe.

The ultimate aim is to construct an archaeomagnetic SV curve for Belgium with Uccle as reference locality, where the first measurement of the geomagnetic field was done in 1895. This curve would include all the available reference data in a radius of about 500 km around Uccle.

Keywords: secular variation, archaeomagnetic dating, Belgium.