

Palaeomagnetic signatures of Iberian Triassic dykes

GOMES, C. S. R. Departamento de Ciências da Terra, FCT Universidade de Coimbra, Coimbra, Portugal

A palaeomagnetic study has been carried out at seven well dated sites in Iberian-Central Zone (Central Portugal). Samples were collected from Upper Triassic basaltic and doleritic dykes. K-Ar data were also obtained for all the igneous bodies (200-220 Ma). These events can be interpreted as contemporaneous to Upper Triassic sedimentary unconformities of the Lusitanian Basin and related to the first rifting phase of the Central Atlantic. This study is based on 123 useful oriented samples and all of them showed, at least, the presence of two components: one with a low coercivity and easily removed at 15 mT; other, a higher-coercivity component, that has been considered as the characteristic remanent magnetization of these rocks, which has declination 347.4° and inclination 31.7° ($N = 7$ sites; $a_{95} = 9.7^\circ$; $K = 39.9$). Two of the studied dykes were formed during a reverse palaeomagnetic field and therefore locality means are standardized to normal polarity. The characteristic components were evaluated by least-squares fitting of linear segments to orthogonal vector plots during progressive demagnetization and by principal-component analysis. The new palaeomagnetic pole obtained is $197.7/67.1$ ($a_{95} = 10.6^\circ$, $K = 41$, $N=7$) and the palaeolatitude is 17.2° . These results are a contribution to an improved outline for the Iberian Mesozoic segment of the apparent polar wander path.