



## **Updated Iberian archaeomagnetic catalogue: new directional Palaeosecular Variation Curve for the last 3 millennia**

Saioa A. Campuzano (1,2), Alberto Molina-Cardín (1,2), Mercedes Rivero (1,2), María Luisa Osete (1,2), Alicia Palencia-Ortas (1,2), José Carlos Pérez-Fuentes (1,2), F. Javier Pavón-Carrasco (1,2), and Miriam Gómez-Paccard (2)

(1) Universidad Complutense de Madrid (UCM), Department of Física de la Tierra, Astronomía y Astrofísica I, Madrid, Spain (sacampuzano@ucm.es, amcardin@ucm.es, merivero@ucm.es, mlosete@fis.ucm.es, ali@ucm.es, josecper@ucm.es, fjpavon@ucm.es), (2) Instituto de Geociencias (IGEO) CSIC, UCM, Madrid, Spain (mgomezpaccard@igeo.ucm-csic.es)

In 2006, the first Iberian archaeomagnetic catalogue for the last 3000 years was presented, including 63 archaeomagnetic directions coming from Spanish archaeological sites. Since then, several archaeomagnetic studies have been carried out in order to cover the main temporal gaps present in this catalogue: the first millennium BC and the Late Roman – High Middle Ages. In this work, the first update of this catalogue is proposed. The directional database has increased by more than 80% (around 50 new data), of which more than 10 palaeodirections come from new studies that had not been previously published. The improvement of the database is especially notable in the first millennium BC, representing more than 50% of the available data in the first directional catalogue for Iberia (around 30 directions). This updated database has provided enough new information to generate a revised directional Palaeosecular Variation Curve (PSVC) for Iberia spanning the last three millennia using the bootstrap technique. This new PSVC offers a comprehensive view of the evolution of the geomagnetic field in this region and is suitable as a Master Curve in the archaeomagnetic dating technique for archaeological combustion structures located in the Iberian Peninsula.