



## **Topo-Iberia GPS network: Preliminary results at UJA analysis centre**

Antonio J. Gil (1), María Clara de Lacy (1), Juan A. Armenteros (1), Federica Riguzzi (2), Roberto Devoti (2), and the Topo-Iberia GPS Team

(1) Dpto. Ingeniería Cartográfica, Geodésica y Fotogrametría. University of Jaen. Spain (ajgil@ujaen.es; mclacy@ujaen.es; jgarmen@ujaen.es), (2) Istituto Nazionale di Geofisica e Vulcanologia, sez. CNT, Roma, Italy.

The project “Geociencias en Iberia: Estudios integrados de topografía y evolución 4D: Topo-Iberia” (Ref.CSD2006-00041) is supported by the Spanish Ministry of Science and Innovation. Its objective is to understand the interactions in the Iberian Peninsula (SW Europe) between deep, shallow and atmospheric processes, through a multidisciplinary approach linking Geology, Geophysics and Geodesy. As part of this project a network of 26 continuous GPS stations, covering the Spanish part of the Iberian Peninsula (22 stations) and Morocco (4 stations) has been established. The major objective behind the establishment of this array is to monitor millimetre level deformation of the crust due to African and Eurasian tectonic plates. More specific goals of the project include the identification of the areas and/or specific seismic faults which exhibit higher deformation rates, which could imply an increased seismic hazard in these specific areas. In December 2008, the network installation was completed and all the stations are fully operational. Data analysis is performed at three different analysis centres: Real Instituto y Observatorio de la Armada (ROA), University of Barcelona (UB) and University of Jaen (UJA). Different approaches to processing GPS data by using different software are being carried out. Preliminary coordinate time series and a first analysis of these results at UJA analysis centre are presented.