



Following solar activity with geomagnetic and cosmic-ray ground-based stations in the Iberian Peninsula region

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The Iberian Peninsula is located in the South-West of Europe between 36°00' N and 43°47' N and between 9°29' W and 3°19' E. There are four Geomagnetic Observatories currently operative in this area devoted to the observation of the Earth's magnetic field: Observatori de l'Ebre (NE Spain); Observatorio de San Pablo de los Montes (central Spain); Observatorio de San Fernando (southern Spain); Observatório de Coimbra (central Portugal); plus another one, Observatorio de Güímar, in Tenerife (Canary Islands, Spain). There is also one neutron monitor located in Guadalajara (central Spain; 40°38' N, 3°9' W at 708 m asl) continuously measuring the arrival of cosmic rays to the Earth's surface. In this work we show combined observations of these six stations during events caused by solar activity. We analyze them looking for differences that could imply extremely local effects caused by the response of the Earth's magnetosphere and ionosphere to solar activity.