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Crustal motion modelling integrating geodynamic and geochemical data: application to southern Iberian Peninsula

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In this work monitoring of crustal deformation and displacement fields using GPS data, is combined with radon measurements for identifying prone-areas to the occurrence of major seismic events. In this way, both geochemical and geophysical data will be integrated with the purpose of obtaining a model which will give a better description and interpretation of deformation and the crustal dynamics. At the same time, this objective has a clear interest for earthquake risk assessment, since it implies a better knowledge of regional tectonics, stress regime and deformation, with the consequent improvement on seismic source characterization. We propose a project for carrying out a practical application based in GPS and radon measurements in southern Spain aimed at improving the knowledge of the degree of activity in the main faults of the Betic Chain.