Abstract Details

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Abstract title:

Heat Flow Density in a Region With Hot Springs - NW of Portugal and SW of Galicia (Spain)

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Heat flow density and temperature are studied in a region characterized by a very marked topography and the existence of thermal springs. The work was made with results obtained in studies involving heat sources in the region due to the decay of radioactive elements and detailed structure of the upper and middle crust, obtained with seismic data (receiver functions). Heat flow density and hot springs data used were obtained in the Atlas of Geothermal Resources in Europe. Gravity and magnetic data in the region were also used.

Three groups of thermal springs were identified and studied. The heat flow density values in the region were analyzed and integrated in the region taking into account measurement depths of temperature, existing aguifers in the region (water reservoirs near the surface) and respective porosities. Temperatures and heat flow distribution in the region presents some differences from results obtained for the same region in other works previously published.