
Preliminary analysis of 80 earthquakes of $M_l > 3.0$ in northwestern France

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Résumé

The north west of metropolitan France is part of a stable continental region, impacted by a diffuse intraplate seismicity with low-to-moderate magnitude earthquakes. To understand the origins of SRCs seismic activity, a better characterization of the seismicity is necessary. The inherited structures of the Armorican Massif seemingly constraint the seismic pattern but, in addition to far-field tectonic stress loading, the influence of processes such as erosion and hydraulic loadings needs to be addressed. This study is part of an ANR project, Ero-Seis, which aims to determine the influence of long-term erosion on deformation rates and seismic activity. We present here the relocation and the estimated moment magnitude of 80 earthquakes of $M_l > 3.0$ between 2015 and 2023 in northwestern France and the focal mechanisms associated with the most important events.

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