

Spatial property of seismicity in southwestern Japan using GIS

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In this study, we evaluated seismicity in southwestern Japan by quantitative analysis using Geographical Information System(GIS). First, we divided epicenter distribution of events into grids, and calculated seismicity of each grid. After adding other various information such as active faults, topography and geological features to this on GIS, it is possible to express the local property of seismicity as a visual pattern. Next, we analyzed the seismicity change of those areas which were divided in property of topography and geological features. Also, the relation between micro-seismicity and active fault segments was considered. Then, we studied whether the spatial property of seismicity had something to do with these geographical parameters mentioned above.