

The multiple inverse method software including clustering functions

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Understanding of the temporal and/or spatial variations of tectonic stress is an important clue to the solution of the problems on seismic activities and tectonics. The multiple inverse method is a technique of stress tensor inversion, and aims at separating stresses from such a data set that are obtained from a rock mass with spatially and/or temporarily changing stress. The method can deal not only with geological fault-slip data but also seismic focal mechanism data.

The stresses significant for a data set are represented by the clusters of stress states in the method, and the clusters are recognized by eyes through the stereoplots of the stress states. The present poster introduces the latest version of software implementing the method with the functions of fuzzy clustering to automate the recognition of the significant stresses. And, we show the resolution of the method using artificial data sets.