

Disaster Prediction Through Pattern Informatics Applied on Global Seismological Data

Pattern Informatics can be used to predict seismic events. Three forms of patterns can be formed using Global seismological data. Temporal Patterns indicating time relationship between different natural seismic events that took place over the past years at least a two decades depicting their sequence towards forming a pattern. Spatial Patterns indicating the geographic locations of the events and order of their occurrences. Most of the seismic events take place around active fault lines however structured study of the database is likely to reveal additional conclusions. Spectral patterns indicating the frequency characteristics of the events establishing forms of interpretable correlations. A three dimensional matrix comprising all three patterns is likely to yield valuable results. However as estimated complete results strongly depend upon completeness of the acquired data from around the globe used in unison. Variations in sensors and estimation techniques can always be catered for using normalization. A test case based on data collected and structured on the basis of regions, where possible, may also help establishing relationships. However importance of global super set remains prime and is called for. Simulations of available data yielded relevant and usable outcomes indicating possible future events with related scale and depth parameters.

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