



Small world in seismic complex networks

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We propose a different analysis of seismicity in terms of complex networks. They are obtained in similar way to that for brain functional networks. In our preliminary results, we observe that the different components of the obtained networks act as different responses to the stimulus given by the general plate motions in the region. The results of this study show that the functional connectivity matrix of seismic activity recordings can be converted into a sparsely connected graph by applying a suitable threshold of the correlation between the cells. So, it can be said that the highest correlated cells in the region forma small world network. This method could be useful to find trigered eartquakes, as well as for declustering the catalogs.