



Cross-SampEn analysis of electroseismic time series

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We use the Cross Sample Entropy method to analyse the regularity of geoelectrical time series taken from independent channels (East-West and North-South directions) monitored at two sites located in México, to assess possible pattern synchrony between the signals. Moreover, we compare the Cross-SampEn for the original data with their corresponding shuffled version to see the effect of broken correlations into the pattern synchrony. We observe that the pattern synchrony, as measured by Cross-SampEn, changes its behavior around an EQ occurrence, which suggests that each channel follows its own dynamics, while both channels exhibit complex behavior by its own.