



Analysis of self-potential earthquake-related signals recorded in Mexico by using the Fisher Information Measure

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The time fluctuations of self-potential data, recorded at the monitoring station Acapulco (Mexico) during 1994-1996 in the seismic area of Guerrero-Oaxaca, are analyzed by means of the Fisher Information Measure (FIM), a nonlinear powerful method to investigate complex dynamics in time series. The time evolution of the FIM shows a clear correlation with the largest earthquakes occurred in the monitored area during the observation period. Seismic precursory patterns in the FIM evolution are also revealed. This work has been performed in the frame of the scientific bilateral agreement CNR/CONACYT.