**SEISMIC ELECTRIC SIGNALS: THE USEFULNESS OF NATURAL TIME IN IDENTIFYING THE OCCURRENCE TIME OF AN IMPENDING EARTHQUAKE**.

PANAYIOTIS A. VAROTSOS, Nicholas V. Sarlis, Efthimios S. Skordas, and Mary S. Lazaridou

*Solid State Section and Solid Earth Physics Institute, Physics Department, University of Athens, Greece*

Seismic Electric Signals (SES) are low frequency (≤ 1Hz) electric signals that have been found [1] to precede earthquakes. They are detected only at certain sites of the Earth's surface termed SES sensitive sites. Magnetovariational profiling and magnetotelluric sounding have been performed around a few sensitive sites, for example around Ioannina station in Northwestern Greece [2]. The analysis of SES activities has been greatly advanced after the introduction of Natural Time [3]. This is a concept that reveals hidden properties in complex time series and identifies, among others, the time when a dynamic system approaches the critical point. Natural time has found applications in diverse fields, e.g., in cardiology (e.g., by identifying the sudden cardiac death risk [4]) and in earthquake prediction by determining the occurrence time of the impending mainshock when SES data are available [5, 6]. Examples are presented which explain how natural time analysis enabled [7] the identification well in advance of the approach to the critical point associated with major earthquakes that occurred in Greece during 2008.

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Panayiotis A. Varotsos, Solid State Section, Physics Department, University of Athens, Panepistimiopolis Zografos, 15784 Greece, tel: +30210-7276737, fax: +30210-9601721, e-mail: pvaro@otenet.gr