Geophysical Research Abstracts, Vol. 7, 02244, 2005 SRef-ID: 1607-7962/gra/EGU05-A-02244 © European Geosciences Union 2005



Are there coseismic electromagnetic signals?

V. Hadjicontis (1) and C. Mavromatou (1)

(1) Physics Department, University of Athens, Panepistimiopolis, Zografos, GR15784, Athens, Greece

As it is well known, acoustic and electromagnetic emission from DC to UHF is detected during the compression of rock samples in the laboratory. On the other hand, many groups, worldwide, perform field experiments, in order to monitor electromagnetic signals, in various frequency bands, that precede imminent earthquakes. However, it is observed that upon the occerence of an earthquake no signals are detected (except the seismoelectrics). This observation demands an interpretation and consists an open question in this scientific area. In the present work, we attempt to give a plausible explanation to the above observation based on sophisticated laboratory experiments.