



## **Study of Electromagnetic emissions in the HF band as earthquake precursors**

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### **Abstract**

This work focuses on the use of electromagnetic emissions (EM) in the HF band as a warning event for earthquakes. EM at HF components 41MHz and 46MHz were monitored and recorded from eight field stations in Greece and correlated with seismological events. A novel algorithm based on the ratio of short term to long term signal average, together with prediction rules to combine results from several stations, was developed. Performance of the system was promising, but was dependent on the geographic area of interest. Overall performance for earthquakes events of magnitude greater than 5.7 R was 75% of seismic events were correctly predicted by EM activity, while 25% were not predicted.