

SAVNET: a potential VLF receiver network to provide signatures on seismic activity related low ionospheric perturbations.

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One has been looking for seismo-electromagnetic phenomena during almost the last decade. However, most of the associations found so far are related to ionospheric perturbations that occurred in the E and F regions as well as at higher altitudes. The ionospheric perturbations related to seismic activity are quite different and cannot be interpreted in a satisfactory way so far, making difficult the understanding of the spatio-temporal behavior and relation between both. In this work we propose to look for low ionospheric related changes, and explain why a careful examination of the D-region of the ionosphere can provide genuine and useful information to better understand the above relation. The South America VLF NETWORK (SAVNET) is a network of VLF receivers that will be installed beginning of 2007 and operating from the second trimester of the same year. We present the advantages of the SAVNET network in looking for seismic related activity and perturbations in the low ionosphere, and discuss the present status of the instrument. When operating, the SAVNET will monitor the D-region in conjunction with the dedicated Detection of ElectroMagnetic Emission Transmitted from Earthquake Regions (DEMETER) instrument.