Observations Co-seismic Electromagnetic Waves Using Synthesized FM Tuner and the Dual Frequency Observation Method

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Observations in electromagnetic fields have been considered as one of the most promising candidates for short-term earthquake prediction. Our observation method using the synthesized FM tuner has a high frequency stability and sensitivity from 76MHz to 90MHz.

In this paper, we describe the observation system configuration and a newly proposed the dual frequency observation method based on the synthesized FM tuner method. Our observation method can detect up to about -120 dBm (0.001 pW) of the received level. So it can observe the galactic noise. Moreover, this paper describe that our system in Hiroshima City University successfully observed the naturally radiated co-seismic electromagnetic waves to the Tottori-ken Seibu Earthquake (Magnitude 7.1, depth 10 km) on October 6 in 2000.