

# Detection of earthquake precursors from exploration of VHF scattering waves

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We introduce investigation about empirical relation between appearance of VHF scattering waves and earthquake occurrence, which called as modified Kushida's method, from observation at five stations in Hokkaido. We found that qualitative characteristics of scattering waves coincide with the empirical law for 32 earthquakes, which occurred from Dec., '02, to Jan., '04. For shallow earthquakes, which occurred beneath land area, scattering waves appeared relatively strong, however for earthquakes which occurred in deep and sea areas, relatively weak. Between logarithm of total duration time of scattering waves,  $\log(T_e)$ , and Magnitude of the related earthquake, good relation is shown.