Geophysical Research Abstracts, Vol. 9, 02300, 2007
SRef-ID: 1607-7962/gra/EGU2007-A-02300

Amplitude variations of the VLF thunderstorm signals passing above the epicenters of strong earthquakes

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The results of consideration of average amplitude variations of the VLF-signals thunderstorm nature passing over areas of some earthquakes with magnitude more than 6 are presented. The data of the analogue registration of the VLF-radionoises intensity at frequency 8,7 kHz at the Yakutsk station (62N,129.7E) and registration of electromagnetic impulses from thunderstorm carried out by means of a one-point lightning location system were used.

Results show, that, despite the non-stationary state of thunderstorms, a decreases in the amplitude of its VLF signals was detected 3–6 days before an earthquake, with the subsequent recovery to the day of events. The effect is similar to the attenuation of the signal amplitude of low-frequency radio stations that is observed for several days before the occurrence of an earthquake. Such a character of earthquake manifestation in thunderstorm VLF signals are registered at different azimuths and different distance up to the centers of earthquakes.