Interactive comment on “The model of own seismoelectromagnetic oscillations of LAI system” by M. K. Kachakhidze et al.

O. Molchanov (Referee)
olmolchanov@mail.ru

Received and published: 10 October 2010

As I understood a main goal of the paper is to explain so-called EMR (electromagnetic radiation) in the frequency range F= 1-100 kHz that appears allegedly in connection with earthquakes. I think the paper is not so useful for any discussion in the present content for the following reasons: a) Two resonances are known in the ground-ionosphere resonator: Schuman ULF resonances (F=7-30 Hz) and VLF transverse resonances (1.7- 6 kHz), both are excited by lightnings. Direct penetration of VLF emission from lithosphere is negligible due to skin-depth attenuation (e.g. Molchanov et al., 1998) and generation inside atmosphere by radon emanation is small due to charge relaxation and incoherence of the sources. Anyway the intensity of the possible additional generation is not comparable with natural thunderstorm excitation; b) At
present EMR effect is not supported by any serious observations, except very old and speculative, and almost nobody, including me, do not believe in the existence of such effect; c) The paper looks as mixture of rather old information and not so professional speculations. Taking into consideration the authors enthusiasm I can recommend to read modern papers on this subject (e.g. rather comprehensive book by Molchanov and Hayakawa, 2008)

Interactive comment on Solid Earth Discuss., 2, 233, 2010.