

Modeling of electromagnetic field in the Earth-ionosphere resonator (Transmission Line Method)

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Abstract: The Schumann resonances – electromagnetic eigenmodes of the resonator bounded by the Earth's surface and lower ionosphere, permanently excited by the global lightning activity – are now widely monitored experimentally. To relate the obtained data with ionospheric parameters the computer modeling of such a resonator is necessary. The various approaches to this task are surveyed and some new insights are suggested.

Key words: electromagnetic field, ionosphere, Schumann resonances, Transmission Line Method

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