

GEOPHYSICAL FIELDS OF MEGALOPOLIS

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Abstract. The Centre of geophysical monitoring for systematic investigation of negative consequences for the human environment and infrastructure of the Moscow city resulting from natural and man-caused factor is described. The Centre is attached to the Institute of Geosphere Dynamics of the Russian Academy of Sciences (IDG RAS). The results of synchronous observations for seismic vibrations, electric and acoustic fields, atmosphere's parameters obtained in the Center and Geophysical observatory «Mikhnevo» of IDG RAS, situated outside of the zone of the Moscow influence, are examined. We revealed megalopolis influence on the physical field amplitudes, their spectra and parameters of natural periodicities. Man-caused factors which influence on the regimes of natural physical processes in the near-surface atmosphere layer are important for megalopolis characterization.

Keywords: megalopolis, instrumental observations, geophysical fields, variation, man-caused sources.