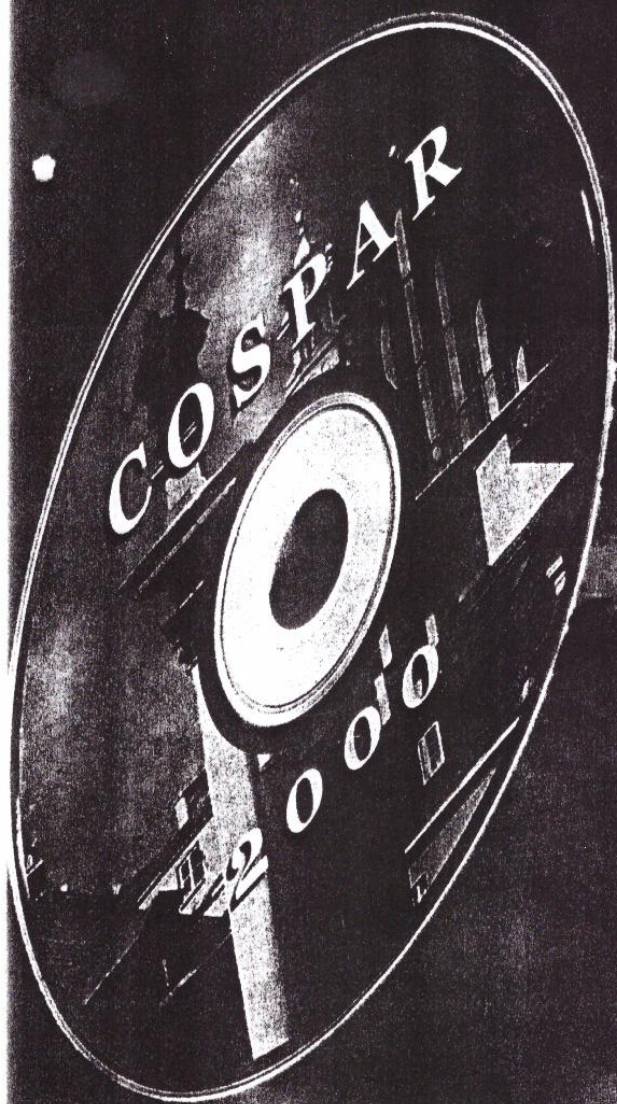


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ATMOSPHERIC ELECTRICITY OF A MEGA-POLIS AND ITS EFFECTS ON THE LOWER IONOSPHERE

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Have been considered main sources of atmospheric pollution (in particular, atmospheric dust) of an anthropogenic and natural characters within a mega-polis. There were made estimations of variations (anomalies) in distributing the gradient of electric potential, vertical current, conductivity and spacial charges in and above the mega-polis (the surface area, $S > 250 \text{ km}^2$); a preliminary model of distribution of electric field in and above the mega-polis being developed. Taking account of the correlation between the electric field in the Earth's atmosphere and changes in the ionosphere, estimations of the electric field variations at the lower boundary of the ionosphere (heights above the Earth $z = 55\text{-}65 \text{ km}$) were made; their possible contribution to dynamics of the ionospheric parameters was estimated. The main channels of the sources considered which influence man's health were singled out.

Abstracts to be submitted on or before January 7, 2000 to Copernicus Office with copy to appropriate Main Scientific Organizer:

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