



Atmospheric electric field: theoretical models, Kamchatka monitoring features, active experiments.

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Theoretical model of the atmospheric electricity with the field source developing by means of electric charges separation in fine water aerosol just in the atmosphere of fair weather rather than in thunderclouds which are commonly accepted. Atmosphere ionization arises from cosmic rays, modified by solar wind. Cosmic rays penetrate into the Earth atmosphere at the Earth near-poles areas with their maximum falling on the regions of Canadian and Siberian geomagnetic anomalies. It is UT-variation of the atmosphere electric field to explain the diurnal irregularity of the electric charge generation. Monitoring of atmospheric electric field at the Kamchatka IKIR geophysical observatory “Paratunka” which is situated nearby the ocean permits the research of the field behaviour features which are lacking at the continental observatories. Powerful hot springs of Kamchatka were used in active experiments on the atmosphere electric field affect by the artificial cloud, generated in the unloading of the deep thermal well. Their results conform to the enclosed theoretical model.