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Development and validation of the model for aerosols transportation in boundary layers

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This work is devoted to creation of the model, which allows to describe three-dimensional atmospheric flows with solid particles or aerosols. We use Nigmatulin equations for two phase atmosphere system describing lifted atmosphere by perfect gas equatuions with variable equation of state.The Godunov numerical method based on decision one dimensional initial discontinuity decay problem on an interface of two cells of computational grid is applied in this work. Model computations are compared with experimental data and with results obtained by LES.