

In a field of environmental protection there is a very important question about the options to determine impact of different pollution sources on air quality in areas more or less distant from those sources. For those predictions we can use physical or computer modelling. In this paper a computer model (Lagrangian Dispersion Model, or LDM) of air pollution propagation is developed and described. The LDM was created in order to work within the CLMM - Charles University Large-Eddy Microscale Model. In this paper we discuss theory of those models as well as technical solutions used to develop the LDM. The model is validated and subsequently applied on several cases with different degree of geometry complexity.