



Modeling of photochemical oxidant level in Central-Europe

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According to the air quality measurements over Europe, Hungary is one of the highest tropospheric ozone-loaded areas. In summer, because of intensive solar-radiation and high temperature, the concentration of secondary air pollutants is much higher than the health limit value. However, it is harmful not only to human health but also to natural and agricultural vegetation as well. Therefore, an important tool in the management of photochemical smog episodes is a computational model which can be used to test the effect of possible emission control strategies and ozone load. The aim of our work is to apply a new and more detailed chemical reaction mechanism in TREX (TRAnsport-EXchange) model, which may refine the ozone concentration calculations. Description of the reaction mechanism and results of model simulations are presented. The spatial variability of ozone concentration has been estimated by the model for Central-Europe for a summer period.