AIR QUALITY FORECASTING SYSTEM FOR BUDAPEST (HUNGARY)

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Abstract: For the past years, industrial production and especially transportation have caused serious environmental contamination in Budapest. There are significant differences between the air quality in the downtown and that of the outskirts in Budapest. In the most cases, PM, O_3 and NO_X concentrations are around or above the limit values, and the 1 hour maximum limit value is exceeded at the monitoring sites not only in the downtown. This situation demands the development of an air quality forecasting system for Budapest to prevent the smog situation with the limitation of the traffic.

This paper presents the first results of the application of the developed dispersion modeling system to predict the air quality in Budapest for 24 hours. Daily average and 1-hour maximum of NO_X, O_3 and PM concentration values are predicted for 24 hours, and these forecasted values are evaluated with the concentration values measured by the air pollution monitoring network of Budapest.