

## The mixing height in urban areas – recent experimental and modelling results

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The urban boundary layer (UBL), exhibits many differences in comparison with the 'rural' homogeneous boundary layer due to the large surface roughness and increased surface heating, and by horizontal inhomogeneity of the mixing height (MH) and other meteorological fields caused by strong variations in surface roughness and heating from rural to central city areas. Most of existing MH parameterizations have been developed for homogeneous terrain conditions, so their applicability for urban conditions should be tested and/or modified. This paper is one such attempt using recent experimental studies of the MH in European urban areas that were analysed within the European FUMAPEX and MEGAPOLI projects, COST-715 and -728 Actions. Based thereon, recommendations on the applicability and the improvement of existing pre-processors, schemes and models for MH are suggested.