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Urbanization Effect on Meteorological Parameters for Istanbul

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As a result of increasing population, the growing industry and rural-urban migration, urbanization has become one of the most important concepts today. Not only the social and economic components of urbanization, but also the impacts on the environment and climate has gained importance. Currently the cities create their own meteorological features and this issue has a significant effect on both human life and environment. Therefore, meteorological factors are important to consider while planning a city. Within this scope, Istanbul is a very convenient city to explore the urban meteorology. The purpose of this study, to present how the city influences the meteorological parameters by using The Weather Research and Forecasting Model (WRF) with building effect parametrizations (BEP). Different urban parametrization schemes will be tested for Istanbul city to see the effect of urban cover. Moreover, the results will be compared with the control runs of The Weather Research and Forecasting Model and the observation data.

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