

Qualitative Reasoning Model about Changes in the Urban Water Cycle Due to Urbanization

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The urbanization process is an important factor that distorts the natural water cycle, which affects both quantity and quality of water resources. The increased urban population is associated with intensive building and using of vast impervious surfaces. This can change the natural water runoff and increases the probability of floods occurring. The increased urban population can cause urban climate change, which results in increased amounts of precipitation. In this study, a qualitative model was developed in the DynaLearn workbench software (<http://www.DynaLearn.eu>) to capture conceptual knowledge about the urban water cycle (UWC) and how urbanization affects its components.

Key words: DynaLearn software, Qualitative Reasoning modelling, Urbanization, Urban water cycle

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