

Estimation of the actual evapotranspiration: an overview of Hungarian efforts

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Actual evapotranspiration (ET) is one of the most important hydrological cycle element. It shows great variability in the space and time, especially above land surface. Its operational measurement-based evaluation above large areas cannot be achieved due to the lack of both technical and economic conditions. Therefore, areal values of ET have to be estimated by models.

There are two basic approaches in modeling of ET: the so called „top-down” approach when ET depends mostly on atmospheric variables and less on land-surface parameters; and the so called „bottom-up” approach when ET depends strongly on land-surface parameters besides atmospheric variables. In Hungary, both approaches are used for estimating areal values of ET, nevertheless, there is no discussion to date on their advantages and drawbacks. The aim of this study is to bridge this gap by reviewing the methods and comparing the results.