Geophysical Research Abstracts, Vol. 7, 01616, 2005 SRef-ID: 1607-7962/gra/EGU05-A-01616 © European Geosciences Union 2005



## Data-driven modelling vs. machine learning in flood forecasting

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Along with the physically-based (process) models based on mathematical descriptions of hydraulic and hydrologic processes, the so-called data-driven models are becoming more and more popular. They are based on the use of methods of computational intelligence and machine learning, and assume the presence of considerable amount of data describing the modelled phenomenon. Artificial neural networks are the most popular tools in this category, but there are a number of other methods that can be successfully used in forecasting of natural phenomena. The paper presents data-driven modelling as process of building a model of a natural process rather than purely machine learning, and gives an overview of several less popular methods that, however, proved to be accurate and robust: regression and model trees, instance-based learning, committee machines and non-linear dynamics. Examples where data-driven methods were used in flood forecasting problems are provided.