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The SIMPEL set of parsimous hydrologic spreadsheet models

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lowland catchment in northern Germany and a 3000km2 mountain catchment in China.

The complexity of hydrologic models has been increasing for years and naturally the time and effort for parameterisation has also increased.

These high requirements were a special problem in teaching hydrology as a subsidiary subject, where time is very limited and mathematical background is weak. This is why we created the SIMPEL system in 1987, a set of spreadsheets to simulate one-dimenional water flux in a soil column. Since then, the model has been used in education but also in practice as a parismous model and quick&dirty tool for first tests or fast simulations. In 2000, a version of the Unit Hydrograph for the discharge simulation has been added and the Solver tool is used for calibration, but the basic structure is still very simple, easy to understand and also easy to adapt and to modify.

In the contribution we show how we use SIMPEL in teaching, on the example simulation projects of a small