

Review of: "A method to employ the spatial organisation of catchments into semi-distributed rainfall-runoff models" by Henning Opiel and Andreas Schumann

The paper presents an interesting effort to utilise spatial organisation of catchment properties to improve the division of a catchment into sub-catchments. The analysis appears promising in the exemplified application on four German catchments using distributed information of pore volume and slope. The obtained variance reduction proves the applicability of the developed method and the associated tools. However, the paper is not recommendable for publication in its present form for more formal reasons.

First problem is that some basic mathematics is unclear, e.g. eqs. (1) and (2). The summation variable in (1) needs clarification. x is running from $i \cdot \Delta s$ to $(i+1) \cdot \Delta s$, but there is no indication of the range of x -values to be applied. In (1) the mean value $E(C)_i$ is established, but in the calculation of the standard deviation in (2) the applied mean value is denoted $E(C)_x$. Such basic formulas must be better presented and explained.

Second problem is the awkward English, which is below an acceptable standard for a high quality journal. There are numerous grammatical errors (punctuation; wrong tense, wrong words, missing words, bad construction of sentences etc.), which is very disturbing for grasping the real content of the paper.

The authors are encouraged to critically revise the paper and resubmit.