

Dear Editor

The aim of the authors is to obtain an analytical solutions to simulate streamflows in the rivers system. Also they try to give a solution to the deal oscillatory in the river networks. The paper addresses relevant scientific questions in the hydrologic scopes, suggesting a good tool in the catchment hydrology, it is well organized and the description of the calculations are complete and precise to allow their reproduction.

But, the absence of monitoring data to testing the capability of the analytical approach is a problem because only the analytical results are insufficient to support the interpretations and the conclusions. Further, the contribute of the hillslope to the runoff in the links is considered only as a baseflow component, but the behavior of the hillslope depend on the geomorphometry of this (see Troch et al. 2003). Sidle et al. 2011 developed a catchment model based on a hydrogeomorphic concept considering the catchments composed of: riparian channel, zero-order basins and hillslopes. For each geomorphic components a specific hydrologic behavior was studed by Sidle et al. (2011). The big issue of the hydrologist is to considered the current partial contributing areas in the streamflow simulation (Lee and Huang 2013. All these aspect are not considered in this study for the runoff simulation on the hillslope. In spite of that, considering the topic of the special issue (geomorphometry) I cannot recommend the study to be published in its current form. In my opinion the work shows promise (albeit, possibly still requiring additional refinement, testing and more field verification) for hydrologic journal.

Best Regards

Albina Cuomo