



Topic: Catchment system dynamics: Processes and feedbacks

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In this meeting we can talk about my main expertise: the focus of my research focus revolves around understanding catchment system dynamics in a holistic way by incorporating both processes on hillslopes as well as in the river channel. Process knowledge enables explanation of the impact of natural and human drivers on the catchment systems and which consequences these drivers have for water and sediment connectivity. Improved understanding of the catchment sediment and water dynamics will empower sustainable land and river management and mitigate soil threats like erosion and off-site water and sediment accumulation with the help of nature's forces. To be able to understand the system dynamics of a catchment, you need to study the catchment system in a holistic way. In many studies only the hillslopes or even plots are studied; or only the channel. However, these systems are connected and should be evaluated together. When studying a catchment system any intervention to the system will create both on- as well as off sites effects, which should especially be taken into account when transferring science into policy regulations or management decisions.