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## Extraordinary Seminar

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# Increasing river floods - fiction or reality?

Wednesday, November 6, 2013, 13:00

ETH Zentrum, CHN L17.1

There has been a surprisingly large number of major floods in the last years around the world which suggests that floods may have increased and will continue to increase in the next decades. However, the realism of such changes is still hotly discussed in the literature. In this presentation I will argue that a fresh look is needed at the flood change problem in terms of the causal factors including river training, land use changes and climate variability. Analysing spatial patterns of dynamic flood characteristics helps learn from the rich diversity of flood processes across the landscape. I will present a number of examples across Europe to illustrate the range of flood generation processes and the causal factors of changes in the flood regime. On the basis of these examples, I will demonstrate how comparative hydrology can assist in learning from the differences of flood characteristics between catchments both for present and future conditions. Focus on the interactions of hydrological and meteorological factors will be instrumental in identifying any changes in the flood occurrence and attributing them to their causes.