Regional Water Cycles and Society

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Our human society is becoming increasingly vulnerable to changes in branches of regional water cycles. But it possibly also contributes to their alterations due to increasing Greenhouse Gas Concentration and adding anthropogenic aerosols into the atmosphere, to changes in land use and improper river management. The previous research initiatives within the GEWEX, concentrating on regional water cycles, may become ideal testbeds for larger—scale studies of such impacts.

In this paper several research efforts and also the impact of recent floods in Europe are discussed introducing also into a new flood forecast system.