

Improved description of the water cycle in the Upper Ganga Catchment using isotopic, geochemical data and model simulations

Abstract:

The project aims at generating field observations (geochemical and isotopes) data in the upper Ganga basin that will provide data about the contributing sources to the water cycle of the upper Ganga basin. The project would use state of the art hydrological models to obtain a better closure of the water budget with an improved representation of water cycle and a better association between water and energy budget. The project study would address the key scientific issues like i) what is the best estimate of the relative strengths of discharge contributions from various reservoirs, ii) what are the fluctuations in the melt water variability on a seasonal to annual scales, and iii) can we represent the processes and their relative contributions in the state of the art hydrological models.