

River discharge measurement with airborne PIV (particle image velocimetry)



The aim is to develop an airborne river discharge measurement technology which can be deployed from lightweight unmanned airborne vehicles. River surface velocity will be measured from video footage of the flow and will be combined with water level and cross section geometry to estimate discharge.

Project type

Topic is suitable for MSc, BSc and special project

Pre-requisite

Hydrology, image processing, geomatics

Group size

1-2 students

Department of supervisors

Main supervisor: DTU Environment

Co-supervisors: DTU Mechanical Engineering or DTU Space

Contact person

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Photo: M. Detert, ETH Zürich

