# 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**

Associate Professor Peter Bauer-Gottwein, DTU Environment (pbau@env.dtu.dk)

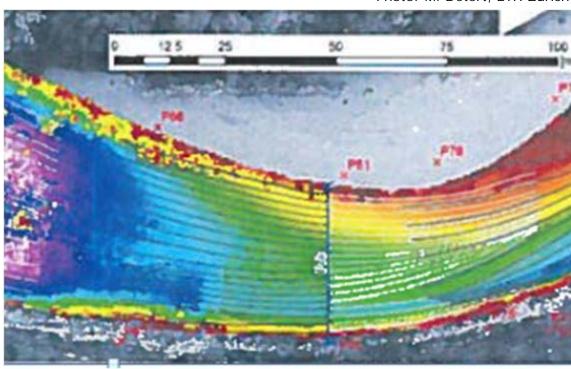


Photo: M. Detert, ETH Zürich

