



Università degli Studi di Pavia
DIPARTIMENTO DI SCIENZE DELLA TERRA E DELL'AMBIENTE

Via Ferrata 1 - 27100 Pavia, Italia

GIS-based Hydrological Modelling Course

SWAT Soil & Water Assessment Tool

Lecturer: Rike Becker (IWW Water Centre, Mühlheim/Ruhr, Germany)

Content:

The Soil & Water Assessment Tool (SWAT) Model is one of the most commonly used hydrological models worldwide. It has been used extensively in research studies which focus on predicting the effect of management decisions on water, sediment, nutrient and pesticide yields as well as in quantitative hydrogeology. It is capable of incorporating detailed information on land management strategies, to account for detailed spatially distributed land-use changes and it has been widely used for climate change impact analyses.

The model is complex as it requires detailed and extensive input data but its application is very user friendly and easy to understand once the general structure of the model is known. When the model is set-up and calibrated, modifications and adaptations to manifold research questions can easily be done.

The course will guide you through:

- the setup, calibration and validation of a SWAT model
- the application of a SWAT model for land-use change and /or climate change scenarios
- some general background on hydrological models and their applications

Date: Monday 01.10.- Wednesday 03.10.2018 (9:00-13:00)

Venue: Computer Pool Piano E

Language: English

The course is addressing PhD-students or MSc-students in Geology or Natural Sciences.

Max. Number of participants 12

For registration and further questions please contact:

Prof. Michael Maerker email: michael.maerker@unipv.it

Prof. Giorgio Pilla email: giorgio.pilla@unipv.it