

Programme 4th International SWAT Conference, July 2 – 6. 2007

Tuesday, July 3rd 2007

Early registration & ice breaking social gathering with beverages at 17:00 –20:00
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Wednesday, July 4th 2007

08:00 – 09:15	Registration + coffee
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Plenary Session (Auditorium 1):
Convener: Ann van Griensven/Cole Green

09:15 – 10:00	Welcoming at UNESCO - IHE Rector Richard A. Meganck, director of the UNESCO-IHE
10:00 – 12:00	Keynote lectures
10:00 – 10:20	Prof. R. K. Price Professor of Hydroinformatics, UNESCO-IHE
10:20 – 10:40	Break
10:40 – 11:10	Dr. Ghassem Asrar USDA ARS Deputy Administrator
11:10 – 11:40	Dr. C. Allan Jones Director, Water Resources Institute and Assistant Vice Chancellor
11:40 – 12:00	Dr. Jeff Arnold (USDA-ARS) and Dr. R. Srinivasan (Texas A&M Univ.)

Wednesday, July 4th 2007

Session 1: Agricultural management (1A)

Convener: Daniel Moriasi

14:00 – 14:20	Isabelle Baudin SWAT: A tool for BMP implementation
14:20 – 14:40	Jos van Orshoven Possibilities and limitations of AVSWAT2000 for the assessment of the environmental impacts of farming practices
14:40 – 15:00	Vinay Pandey Development of effective management plan for a small watershed using AVSWAT
15:00 – 15:20	Manoj Jha Optimal placement of conservation practices in Iowa watersheds using Genetic Algorithm with SWAT

Session 2: Sediment modelling (1B)

Convener: Sue White

14:00 – 14:20	Jari Koskiah Assessment of Hydrology and Sediment Transport and Prospects of Simulating Agri-Environmental Measures with SWAT
14:20 – 14:40	Yiannis Panagopoulos LAND Use Change Effects on River Sediment Yields in Western Greece
14:40 – 15:00	P.M. Ndomba Sediment Yield Modelling using SWAT model at Larger and Complex Catchment: Issues and Approaches. A Case of Pangani River Catchment, Tanzania
15:00 – 15:20	Peter Allen Rapid Geomorphic Assessment of Watershed Sediment Budgets for Water Supply Reservoirs Using SWAT and Sub-Bottom Acoustical Profiling

Wednesday, July 4th 2007

Session 3: Climate change (1A)

Convener: Valentina Krysanova

15:50 – 16:10	Claudia Hiepe Modelling soil erosion in a sub-humid tropical environment at the regional scale considering land use and climate change
16:10 – 16:30	Faith W. Githui Assessment of impacts of climate change on runoff: River Nzoia catchment, Kenya
16:30 – 16:50	Mike Winchell Modeling the Impacts of Municipal Consumption Rates, Outflow Regulation, and Climate Change on a Small Water Supply in North-Central Vermont

Session 4: Agricultural management (1B)

Convener: Ali Saleh

15:50 – 16:10	Nina Omani Modeling of a River Basin Using SWAT Model and GIS
16:10 – 16:30	Hiroaki Somura Application of the SWAT Model to the Hii River Basin, Shimane Prefecture, Japan
16:30 – 16:50	M.P. Tripathi Management scenario for the critical sub-watersheds of Chhokranala watershed in Chhattisgarh

Thursday, July 5th 2007

Session 5: Integrated modelling (1A)

Convener: Roland Price

08:30 – 08:50	Chris George MWSWAT: free GIS support for SWAT
08:50 – 09:10	Pierluigi Cau The WEB BASHYT DSS: A Web Based Decision Support System For Water Resources Management
09:10 – 09:30	Ali Saleh Application of environmental models SWAT and APEX and Farm Economic Model using SWAPP program to evaluate BMBs at the field and watershed levels.
09:30 – 09:50	Jan Cools Modelling the impact of emission reduction measures with SWAT: a tool to set up river basin restoration plans

Session 6: Soil water (1B)

Convener: Ashvani Gosain

08:30 – 08:50	Shaeban Ali Gholami An estimate on soil moisture in different soil horizons of plants root zones by the SWAT model (A case study on L ATIAN Emameh Watershed)
08:50 – 09:10	Daniel Moriasi Incorporation of Hooghoudt's and Kirkham Tile Equations into SWAT2005
09:10 – 09:30	Jane Frankenberger Estimation of Nitrate Leaching from A Tile Drained Watershed Using SWAT
09:30 – 09:50	B. Sohrabi The effect of the operation time of sprinkler irrigation system on the cotton yield

Thursday, July 5th, 2007

Session 7: Hydrological processes (1A)
Convener: Stefan Uhlenbrook

10:20 – 10:40	Stefan Julich Distributed model structures in catchment scale modeling
10:40 – 11:00	Claire Baffaut SWAT in Karst or how SWAT behaves in a river basin characterized by karst hydrology
11:00 – 11:20	Brett Watson Modification of SWAT to simulate saturation excess runoff
11:20 – 11:40	Peter Vanrolleghem Toward an Improvement of the Hydrological Performance of the SWAT Model Under Snow Cover and During Snowmelt
11:40 – 12:00	(Cancelled)

Session 8: Ecological and water quality processes (1B)
Convener: Nicola Fohrer

10:20 – 10:40	Ann van Griensven Modelling mitigation measures for pesticide pollution control using SWAT
10:40 – 11:00	Veronique Vandenberghe Use of catchment models for pesticide risk assessment: application of SWAT in the Nil catchment .
11:00 – 11:20	Ian Holman Using SWAT to support the Habitats Directive in the UK- a case study from the east of England
11:20 – 11:40	Philip Gassman An Alternative Approach for Analyzing Wetlands in SWAT for the Boone River Watershed in North Central Iowa
11:40 – 12:00	Anthony Lehmann Building a spatial framework for the analysis of benthic fauna along the river network of Switzerland

Thursday, July 5th 2007

Session 9: Nutrient modelling (1A)

Convener: Martin Volk

14:00 – 14:20	Ashvani Kumar Gosain Reaction kinetics for modeling non-point source pollution of nitrate with SWAT
14:20 – 14:40	Valentina Krysanova Identification of point and diffuse sources contribution and role of retention processes in large river basins: comparison of three approaches
14:40 – 15:00	Matjaz Glavan Using SWAT to assess nutrient reduction measures in the Axe catchment, UK

Session 10: Semi-Arid regions/Water resources (1B)

Convener: Willy Bauwens

14:00 – 14:20	Monireh Faramarzi Application of SWAT to Quantify Internal Renewable Water Resources in Iran
14:20 – 14:40	S. Boroomand Nasab Irrigation main alternative for solving of global water crisis
14:40 – 15:00	Amardeep Singh Water Allocations using GIS based Hydrological Modelling

15.10 – 16.30	Plenary Session on Model Developments Convener: Jeff Arnold
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16.30

Departure for boat trip and dinner

Friday, July 6th 2007

Session 11: Water quality modelling (1A)
Convener: Peter Vanrolleghem

08:50 – 09:10	Karim Abbaspour Application of SWAT to Modelling Hydrology and Water Quality in the prealpine/alpine Thur Watershed in Switzerland
09:10 – 09:30	Nicola Fohrer Modelling German lowland catchments with SWAT – experiences and challenges
09:30 – 09:50	Valentina Krysanova Water Quality Modelling in a Highly Regulated Lowland Catchment
09:50 – 10:10	Stefan Liersch How Realistic is the Implementation of the European Water Framework Directive in River Basins Dominated by Agriculture? The Example of the Upper Ems River Basin (Germany)

Session 12: Data and modelling (1B)
Convener: Raghavan Srinivasan

08:50 – 09:10	Francisco Olivera Importance of the Spatial Variability of the Hydrologic System and Spatial Resolution of the Data when Modeling Small Watersheds with SWAT
09:10 – 09:30	Ann van Griensven Catchment Modelling using Internet based Global Data
09:30 – 09:50	Jürgen Schuol Taking the step from a large-scale hydrological model (West-Africa) to a continental model (Africa)
09:50 – 10:10	Mustafa Gökmen Evaluation of the SWAT Model Setup Process Through A Case Study in Roxo Catchment, Portugal

Friday, July 6th 2007

Session 13: Land use (1A)

Convener: Antonio Loporto

10:40 – 11:00	Alejandra Stehr Modelling stream flows under different land use conditions using SWAT: Preliminary results from a Chilean case study
11:00 – 11:20	Kassa Tadele Impacts of Land use/cover dynamics on streamflow: The case of Hare watershed, Ethiopia
11:20 – 11:40	M. Rafee Majid SWAT in Land Use Planning: Simulating Impacts of Density and Physical Layout of Residential Subdivisions on the Hydrology of an Urbanizing Watershed
11:40 – 12:00	Jos van Orshoven DEFINITION of HRU using Area Fraction Images derived from Spectral Unmixing

Session 14: Sensitivity and uncertainty (1B)

Convener: Veronique Vandenberghe

10:40 – 11:00	Xianglian Li Sensitivity Analysis of SWAT and an Application to the Yellow River Basin
11:00 – 11:20	Michael Rode Impact of Point Rainfall Data Uncertainties on SWAT Simulations
11:20 – 11:40	R. Daren Harmel Consideration of Measurement Uncertainty in the Evaluation of Goodness-of-Fit in Hydrologic and Water Quality Modeling
11:40 – 12:00	Mazdak Arabi Sensitivity analysis of sediment processes with SWAT

Friday, July 6th 2007

Session 15: Integrated modelling (1A)

Convener: Karim Abbaspour

14:00 – 14:20	Il Moon Chung Integrated Modeling of Surface Water and Groundwater by Using Combined SWAT-MODFLOW Model
14:20 – 14:40	Jiri Nossent Comparing SWAT and WETSPA on the river Grote Laak, Belgium
14:40 – 15:00	Pedro Leitão Integration of MOHID model and tools with SWAT model
15:00 – 15:30	Hamed Rouhani Improved Rainfall-Runoff Modeling Combining a Semi-Distributed Model with Artificial Neural Networks

Session 16: Model Calibration (1B)

Convener: Mazdak Arabi

14:00 – 14:20	Willem Vervoort Uncertainties in calibrating SWAT for a semi-arid catchment in NSW (Australia)
14:20 – 14:40	Shimelis Gebriye Calibration and Validation of SWAT2005/ArcSWAT in Anjeni Gauged Watershed, Northern Highlands of Ethiopia
14:40 – 15:00	Karim Abbaspour SWAT-CUP, calibration and Uncertainty Programs for SWAT
15:00 – 15:30	Peter Droogers Spatial calibration of a distributed hydrological model using Remote Sensing derived evapotranspiration in the Upper Bhima catchment, India

Friday, July 6th 2007

Session 17: Water quality (1A)

Convener: Ann van Griensven

15:50 – 16:10	James Almendinger Problems and Solutions in Applying SWAT in the Upper Midwest United States
16:10 – 16:30	Roberta Salvetti Application of SWAT Model on Three River Basins within the Venice Lagoon Watershed (Italy): Source Apportionment And Scenario Analysis
16:30 – 16:50	Cole Green Evaluation of Phosphorus Transport Methods in the Soil and Water Assessment Tool

Session 18: Forest modelling (1B)

Convener: Fred Hatterman

15:50 – 16:10	Pedro Leitão Simulating <i>Nothofagus</i> forests in the Chilean Patagonia: a test and analysis of tree growth and nutrient cycling in SWAT
16:10 – 16:30	Gordon Putz Evaluating the role of shrub, grass and forb growth after harvest in forested catchment water balance using SWAT coupled with the ALMANAC model
16:30 – 16:50	Martin Wattenbach Hydrological impact assessment of afforestation and change in tree-species composition – a regional case study for the federal state of Brandenburg (Germany)

17:00-19:00	Social closing gathering with beverages
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Poster Presentations

Fethi Abdelli

Use of SWAT-WH for assessing the effects of land use changes in the arid Oum Zessar watershed, southeast Tunisia

Ou Yang Wei

Landscape transformations and impacts on regional non point source pollution load by upper Yellow River basin

S. Boroomand Nasab

Variations of Soil Infiltration Rate under Different Tillage Operations

Jiří Kadlec

Simulation of extreme rainfall-runoff events using SWAT 2005

Henning Busche

Modelling hydrological processes in a semi-arid, mountainous environment at the regional scale

Manuel Reyes

SWAT Stream Flow Predictions in the Upper Haw River Watershed of North Carolina

Peter Droogers

Spatial calibration of a distributed hydrological model using Remote Sensing derived evapotranspiration in the Upper Bhima catchment, India

A.D. Khan

Gis Based Hydrological Modeling Of Upper Indus Basin

Kittiwet Kuntiyawichai

Application of the SWAT model in the Chi river basin, Thailand, and application of different land use scenarios

Pengtao Yu

Influence of Afforestation on Water Resources in Northern China

A. Jaleh, A. Jalalian , K. C. Abbaspour, and M. Afyouni

Sediment and Runoff Estimation Using SWAT Model in Mountainous Watershed in Iran (a Case Study: Vanak, West Iran)

Armen Kemanian

Evaluation of the incorporation of a simple carbon model into SWAT2005

Samaneh S. Ghasemi

Effect of Climate Change on Streamflow in Zayanderoud in Iran

R. Rostamian (Jalalian)

Application of SWAT Model to Estimate Runoff and Sediment in a Mountainous Watershed (Case Study: Beheshtabad, Central Iran)

Nam Won Kim

On the Characteristics of Flow Duration Curve According to the Operation of Multi-purpose Dams in Han-River Basin

Flora Umuhire

Modelling Tile Drainage for Modelling Nutrient Transport in the Pike River Watershed using SWAT.

Didier Haguma

Development of a hydrologic model of Kagera River basin using remote sensing data

Ali Sadeghi

Comparison of SWAT and AnnAGNPS applications to a sub-watershed within the Chesapeake Bay Watershed in Maryland

Elke Verbeeten

The Impacts Of Climate Change On Hydrological Services Provided By Dry Forest Ecosystems In West Africa

Ian Holman

Application of SWAT in a mountainous arid catchment in United Arab Emirates

K. Schneider

Does it runoff when it rains? - Challenges in model calibration in a semi-arid catchment in northern China

Jim Kiniry

Simulating Bermudagrass, Bahiagrass, and Native Range Species on Diverse Sites in Texas

Cole Green

Evaluation of Phosphorus Transport Methods in the Soil and Water Assessment Tool