

INTERNATIONAL SOIL AND WATER ASSESSMENT TOOL CONFERENCE

SWAT 2018



19-21 September / Brussels, Belgium

AGENDA

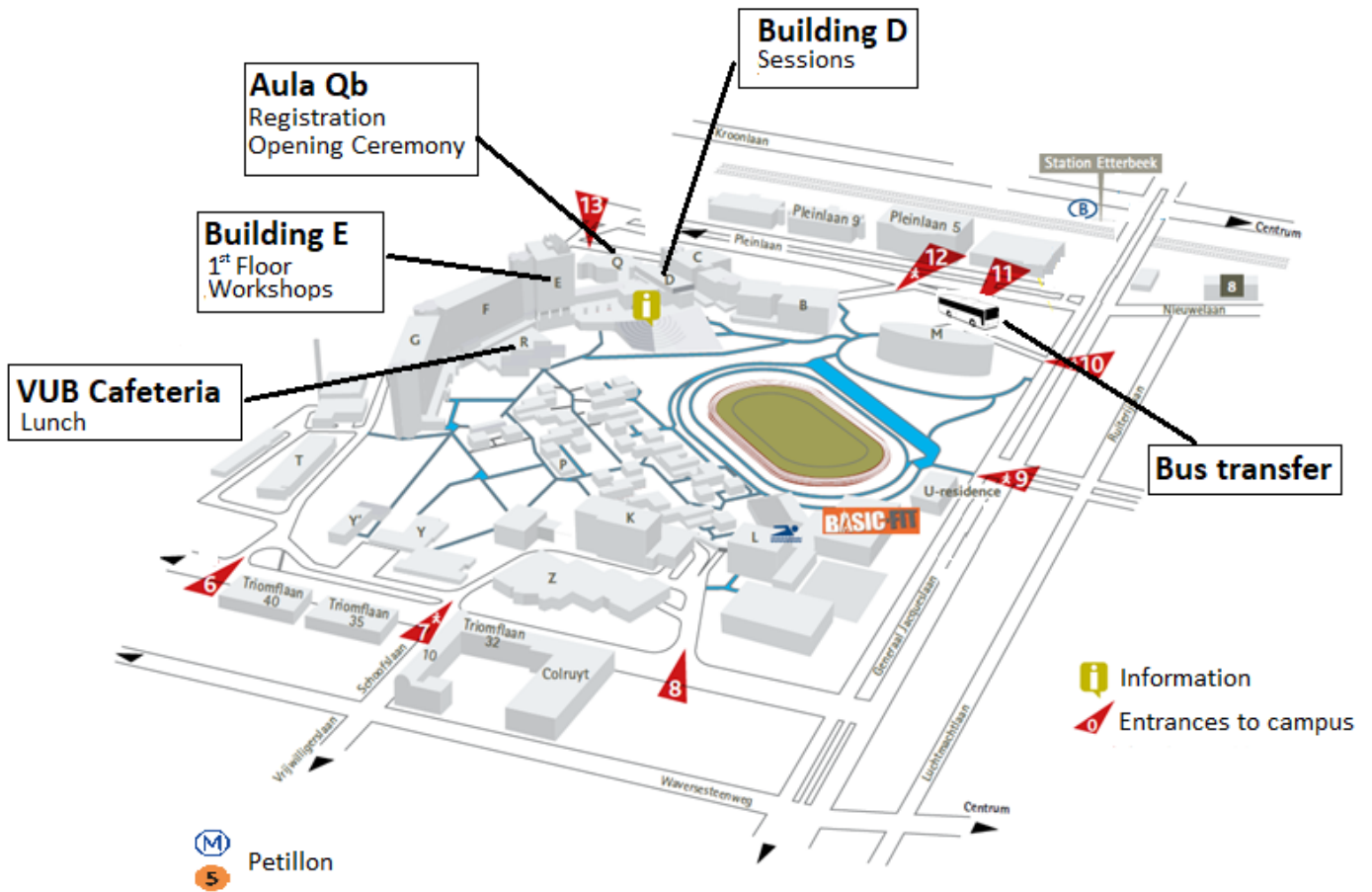


The Soil and Water Assessment Tool (SWAT) is a public domain model jointly developed by USDA Agricultural Research Service (USDA-ARS) and Texas A&M AgriLife Research, part of The Texas A&M University System.

SWAT is a small watershed to river basin-scale model to simulate the quality and quantity of surface and ground water and predict the environmental impact of land use, land management practices, and climate change. SWAT is widely used in assessing soil erosion prevention and control, non-point source pollution control and regional management in watersheds.

swat.tamu.edu | facebook.com/swatmodel | twitter.com/swat_model

VUB Campus Map



Conference Overview

Wednesday, September 19		
8:00 – 9:00	Registration and Check-in	Aula Qb
9:00 – 10:30	Opening Ceremony	Aula Qb
10:30 – 11:00	Coffee Break and Group Photo	
11:00 – 12:30	A1 SWAT+ A2 Sensitivity Calibration and Uncertainty A3 Environmental Applications	Building D.2.20 Building D.2.18 Building D.2.19
12:30 – 14:00	Lunch	VUB Cafeteria
14:00 – 15:30	B1 SWAT Applications for Ecosystem Services B2 Model Development B3 Hydrology B4 Large Scale Applications	Building D.2.20 Building D.2.18 Building D.2.19 Building D.2.16
15:30 – 16:00	Coffee Break	
16:00 – 17:30	C1 Climate Change Applications C2 BMPs C3 Hydrology C4 InStream Sediment and Pollutant Transport / Pesticides, Bacteria, Metals, and Pharmaceuticals	Building D.2.16 Building D.2.18 Building D.2.19 Building D.2.20
18:30 – 22:30	Dinner Gala	Chalet Robinson

Thursday, September 20

9:00 – 10:30	D1	SWAT Applications for Ecosystem Services	Building D.2.16
	D2	Sensitivity Calibration and Uncertainty	Building D.2.18
	D3	Model Development	Building D.2.19
	D4	Climate Change Applications	Building D.2.20
10:30 – 11:00	Coffee Break		
11:00 – 12:30	E1	SWAT+	Building D.2.20
	E2	Sediment, Nutrients, and Carbon	Building D.2.18
	E3	Environmental Applications	Building D.2.19
	E4	Hydrology	Building D.2.16
12:30 – 13:30	Lunch		VUB Cafeteria
13:30 – 14:30	F1	SWAT+ Demo	Aula Qb
14:30 – 15:00	Transfer to Royal Academy of Sciences (KVAB)		
15:00 – 17:00	G1	Poster Session	KVAB
17:00 – 19:00	Tours		

Friday, September 21

9:00 – 10:30	H1	Sediment, Nutrients, and Carbon	Building D.2.16
	H2	Hydrology	Building D.2.18
	H3	Climate Change Applications	Building D.2.19
10:30 – 11:00	Coffee Break		
11:00 – 12:30	I1	Environmental Applications	Building D.2.16
	I2	Climate Change Applications	Building D.2.18
	I3	Hydrology	Building D.2.19
12:30 – 13:30	Lunch		VUB Cafeteria
13:30 – 15:00	J1	Model Development	Building D.2.16
	J2	Climate Change Applications	Building D.2.18
	J3	Hydrology	Building D.2.19
15:00 – 16:00	Closing Session		Aula Qb

Wednesday, September 19

8:00 – 9:00 **PARTICIPANT CHECK-IN AND REGISTRATION**
Aula Qb

9:00 – 10:30 **OPENING CEREMONY**
Aula Qb

9:00 – 9:10 **Prof. Ann van Griensven**
Head of Department Hydrology and Hydraulic Engineering VUB

9:10 – 9:20 **Prof. Caroline Pauwels**
Rector VUB

9:20 – 10:10 **Prof. Jeff Arnold, USDA-ARS**
Prof. Raghavan Srinivasan, Texas A&M University

10:10 – 10:30 Discussion

10:30 – 11:00 **COFFEE BREAK AND GROUP PHOTO**

11:00 – 12:30 **SESSION A1: SWAT+** **Moderator:** Jeff Arnold,
Building D.2.20 USDA-ARS

11:00 – 11:20 Jeff Arnold Utilizing the New SWAT+ Structure to Improve U.S.
National Conservation and Environmental
Assessments

11:20 – 11:40 Celray James Chawanda Using Soft Data to Calibrate SWAT+ Models

11:40 – 12:00 Paul Wagner Exploring the capabilities of SWAT+ in a rural
lowland catchment in the North of Germany

Wednesday, September 19

11:00 – 12:30	SESSION A2: Sensitivity Calibration and Uncertainty Building D.2.18	Moderator: Jiri Nossent, VUB, Belgium
11:00 – 11:20	Latif Kalin	Modeling Strategies for a Groundwater Dominated Headwater System
11:20 – 11:40	Thais Fujita	Nearest Neighbor and Inverse Distance Weighting for rainfall estimation in SWAT application
11:40 – 12:00	Gokhan Cuceloglu	Evaluating the Impact of Different Input Datasets and Model Configuration Uncertainty on Streamflow Simulations by Using SWAT Model
12:00 – 12:20	Carla Camargos	Optimization of SWAT performance using a Python tool
11:00 – 12:30	SESSION A3: Environmental Applications Building D.2.19	Moderator: Jaehak Jeong, Texas A&M AgriLife Research, USA
11:00 – 11:20	Marco Napoli	Analysis of the land-use and climate changes on sediment discharged from cultivated field in a rural hilly basin in Italy
11:20 – 11:40	Li-Chi Chiang	Integrating landscape metrics and hydrologic modeling to assess the impact of natural disturbances on ecohydrological processes in the Chenyulan watershed, Taiwan
11:40 – 12:00	Ci-Jyun Liao	Comparative assessment of SWAT-Twn model performance for simulating erosion and sediment transport in two distinct basins in Taiwan
12:00 – 12:20	Tarigan Suria	Assessing relative impact of change in soil infiltration and plant transpiration on the catchment water yield component and water scarcity in the Tropical Lowland Rainforest Transformation Systems (Sumatra, Indonesia)

Wednesday, September 19

12:30 – 14:00

LUNCH

VUB Cafeteria

14:00 – 15:30

SESSION B1: SWAT Applications for Ecosystem Services

Building D.2.20

Moderator: Martin Volk,
UFZ-Helmholtz Centre for
Environmental Research

14:00 – 14:20

Martin Volk

Using SWAT and other models for simulating ecosystem services and trade-offs – A critical reflection

14:20 – 14:40

Michael Strauch

Land sparing or sharing or something in between? Multi-objective land use optimization based on scenario analysis.

14:40 – 15:00

Roxelane Cakir

Using SWAT modeling to quantify water regulation functions in South-Western Europe watersheds

15:00 – 15:20

Nina Zarrineh

Impact analysis of land management scenarios on ecosystem services using SWAT

14:00 – 15:30

SESSION B2: Model Development

Building D.2.18

Moderator: Xuesong Zhang,
Pacific Northwest
National Laboratory and
University of Maryland

14:00 – 14:20

Seyed Saeid Ashraf
Vaghefi

Runoff determination in glacierized basins, using SWAT-GERM framework

14:20 – 14:40

Xuesong Zhang

Advancing coupled water-energy-carbon processes within SWAT toward improved watershed sustainability assessment

14:40 – 15:00

Matin Baymani-Nezhad

Implementation of a recursive numerical filter for updating individual flood hydrographs

Wednesday, September 19

14:00 – 15:30	SESSION B3: Hydrology Building D.2.19	Moderator: Ilyas Mashi, UNESCO-IHE
14:00 – 14:20	Saroj Verma	Modification of Infiltration Characteristics of Natural Ground Formations using Horton's Model
14:20 – 14:40	Joy Sanyal	Impact of different types of meteorological data inputs on predicted hydrological and erosive responses to projected land use change
14:40 – 15:00	Qingrui Wang	Water environmental capacity calculation based on SWAT model in Xiangxi River Watershed, China

14:00 – 15:30	SESSION B4: Large Scale Applications Building D.2.16	Moderator: Anthony Lehmann, University of Geneva
14:00 – 14:20	Anthony Lehmann	Deriving water quality indicators from essential water variables with SWAT
14:20 – 14:40	Rajesh Gupta	Integrated Water Resources Management (IWRM) of Kosi Basin for Regional Economic Development
14:40 – 15:00	Narendra Kumar Tiwary	Integrated Flood Management in Bagmati river basin Using Modern Technology
15:00 – 15:20	Narendra Kumar Tiwary	Sustainable Watershed Management in Ganga river basin Using SWAT Model

15:30 – 16:00 **COFFEE BREAK**

Wednesday, September 19

16:00 – 17:30	SESSION C1: Climate Change Applications Building D.2.16	Moderator: Mikołaj Piniewski, Warsaw University of Life Sciences
16:00 – 16:20	Mikołaj Piniewski	Model-based reconstruction and projections of soil moisture anomalies and crop losses in Poland
16:20 – 16:40	Joanna O'Keeffe	Projections of climate change impact on wetland habitats within Natura 2000 in Poland
16:40 – 17:00	Tirupati Bolisetti	Understanding the climate model uncertainty in streamflow projection
17:00 – 17:20	Melanie Raimonet	Water quality regulation functions under future climate change in South-Western Europe catchments
16:00 – 17:30	SESSION C2: BMPs Building D.2.18	Moderator: Michael White, USDA-ARS
16:00 – 16:20	Michael White	Development of a simple field scale conservation planning tool using SWAT based export coefficients
16:20 – 16:40	Matjaž Glavan	The Use of the APEX Model for the Evaluation of Different Types of Agricultural Land Management
16:40 – 17:00	Natalia Uribe	Spatio-temporal critical source areas (CSAs) affecting surface run-off of traditional agricultural practices in Riogrande watershed, Colombia.
17:00 – 17:20	Jeffrey Nannan	Lean Six Sigma for Watershed Management

Wednesday, September 19

16:00 – 17:30	SESSION C3: Hydrology Building D.2.19	Moderator: José Miguel Sánchez-Pérez, CNRS-ECOLAB, France
16:00 – 16:20	Farida Dechmi	SWAT2012 model evaluation in semi-arid irrigated watershed
16:20 – 16:40	José Miguel Sanchez Perez	AGUAMOD: A decision support system to evaluate water resources during low water period in South-Western Europe catchments
16:40 – 17:00	T.A. Jeewanthi Gangani Sirisena	Use of evaporation and streamflow data in hydrological model calibration
17:00 – 17:20	Jaehak Jeong	Simulating Inbred Corn Yields and Nitrogen Fate with APEX
16:00 – 17:30	SESSION C4: InStream Sediment and Pollutant Transport / Pesticides, Bacteria, Metals, and Pharmaceuticals Building D.2.20	Moderator: Philip Gassman, Iowa State University, USA
16:00 – 16:20	Philip Gassman	Application of SWAT for the Boone River Watershed in North Central Iowa, U.S.: Implications of Different Nutrient Load Estimation Techniques for Model Testing
16:20 – 16:40	Ming Fai Chow	Modeling the efficiencies of check dams on reducing the sedimentation problem: A case study of the Cameron Highlands reservoir in Malaysia
16:40 – 17:00	Le Hoang Tu	Improvement and application of the PCPF-1@SWAT2012 model for predicting pesticide transport: A case study of the Sakura River watershed
17:00 – 17:20	Minjeong Kim	Modeling the impact of land use change on basin-scale transfer of fecal indicator bacteria: SWAT model performance
18:30 – 22:30	DINNER GALA Chalet Robinson Sentier de l'Embarcadere 1, 1000 Brussels Buses provided	

Thursday, September 20

9:00 – 10:30	SESSION D1: SWAT Applications for Ecosystem Services Building D.2.16	Moderator: Stefan Julich, TU Dresden
9:00 – 9:20	Bryan Clark Hernandez	Hydrologic Impact Analysis of Land Use Change on Tropical Coastal Mangrove Ecosystems: Aklan, Philippines
9:20 – 9:40	Shashidhar Thatikonda	Valuing Hydrological outputs as Water related Ecosystem Services under Present and Future Climate Scenarios for Godavari basin
9:40 – 10:00	So Young Woo	Improvement of Aquatic Ecology Healthiness by Securing Stream Maintenance Flow and Applying Agricultural Best Management Practices
9:00 – 10:30	SESSION D2: Sensitivity Calibration and Uncertainty Building D.2.18	Moderator: Gerald Corzo, UNESCO-IHE
9:00 – 9:20	Ming Fai Chow	Calibration and uncertainty analysis of SWAT model for stream flow modelling in the tropical highlands watershed
9:20 – 9:40	Jalel Aouissi	Sensitivity of SWAT modeling in the Mediterranean Joumine dam catchment
9:40 – 10:00	Saeid Ashraf Vaghefi	Quantifying the cascade of uncertainty in hydro-climate modeling: a prior step for decision making under uncertain condition
10:00 – 10:20	Rodrigo Miranda	Calibration of three basins located in different climatic regions in the state of Pernambuco, Brazil

9:00 – 10:30	SESSION D3: Model Development Building D.2.19	Moderator: Ryan Bailey, Colorado State University, USA
9:00 – 9:20	Tammo Steenhuis	Revisiting SWAT as a semi-distributed saturation-excess runoff model for humid temperate and monsoonal climates
9:20 – 9:40	Bhumika Uniyal	Improving the Auto-irrigation Scheduling of SWAT for Effective Agricultural Water Management
9:40 – 10:00	Ryan Bailey	A Salinity Chemistry and Transport Module for SWAT
10:00 – 10:20	Ryan Bailey	Developing an integrated surface/subsurface watershed model by coupling APEX and MODFLOW
9:00 – 10:30	SESSION D4: Climate Change Applications Building D.2.20	Moderator: Faith Githui, Department of Economic Development, Australia
9:00 – 9:20	Eugenio Molina-Navarro	Modelling the combined effects of land use and climate changes on water availability and quality in the Odense Fjord catchment (Denmark).
9:20 – 9:40	Benjamin Munster	The Impact of Future Urban Expansion on Stream Flow in Bryan/College Station, TX, Watershed
9:40 – 10:00	Se Hoon Kim	Assessment of Future Climate Change Impact on Groundwater Behavior of Geum River Basin in South Korea Using SWAT
10:00 – 10:20	Won Jin Kim	Anti-Drought Capacity Assessment by Applying Future Dry Climate Change Scenario for a Multipurpose Dam Using SWAT

10:30 – 11:00

COFFEE BREAK

11:00 – 12:30

SESSION E1: SWAT+
[Building D.2.20](#)

Moderator: Katrin Bieger,
Texas A&M AgriLife, USA

11:00 – 11:20

Katrin Bieger

Exploring the sensitivity of upland – floodplain – stream connectivity in SWAT+

11:20 – 11:40

Ann van Griensven

Simulation of flooding of riparian wetlands using SWAT+

11:40 – 12:00

Imeshi Weerasinghe

Evaluation of the Soil and Water Assessment Tool Plus (SWAT+) for Evapotranspiration using Remote Sensing derived products for the Blue Nile Basin

11:00 – 12:30

SESSION E2: Sediment, Nutrients, and Carbon
[Building D.2.18](#)

Moderator: Sabine Sauvage, UMR-ECOLAB,
France

11:00 – 11:20

Natalja Čerkasova

Development of the transboundary large river watershed model for hydrology and water quality using modified SWAT setup procedure

11:20 – 11:40

Hong Hanh Nguyen

Comparative study of modelling sediment and nutrient loads of a small semi-arid catchment by the alternative models SWAT and SOURCE

11:40 – 12:00

Xi Wei

Assessing the SWAT model sediment and carbon loads in a tropical watershed: the Red River study case (China and Vietnam)

Thursday, September 20

11:00 – 12:30	SESSION E3: Environmental Applications Building D.2.19	Moderator: José Miguel Sánchez-Pérez, CNRS-ECOLAB, France
11:00 – 11:20	Odile Leccia-Phelpin	Land management mitigation scenarios for alleviating impacts on water resources. An application of the SWAT model, part of integrated assessment
11:20 – 11:40	Chung Gil Jung	Evaluation of Aquatic Ecology Health Index Using Extreme Gradient Boosting Tree and SWAT
11:40 – 12:00	Petr Krpec	SWAT application in case of small reservoir watershed, Czech Republic
12:00 – 12:20	Latif Kalin	Modelling the impacts of conservation practices on water quality at a reservoir catchment in southern Brazil
11:00 – 12:30	SESSION E4: Hydrology Building D.2.16	Moderator: Seifu Tilahun, Bahir Dar University
11:00 – 11:20	Alemayehu Shawul	Effects of land cover change scenarios on the long-term runoff in the Akaki river watershed, Ethiopia
11:20 – 11:40	Chinaporn Meechaiya	Effect of land use and land cover dynamics on streamflow by using SWAT model in Chindwin Basin, Myanmar
11:40 – 12:00	Winfred Mbungu	Modeling Streamflow Response to Changes in Land Use and Land Cover in the Upper Ruvu Watershed, Tanzania
12:00 – 12:20	Winfred Mbungu	Investigating the Hydrologic Response to Changes in Land Use and Land Cover in the Kihansi River Watershed, Tanzania
12:30 – 13:30	LUNCH VUB Cafeteria	

13:30 – 14:30

SESSION F1: SWAT+ Demo

[Aula Qb](#)

Demonstration of QSWAT+ and SWAT+ Editor by Chris George and Jaclyn Tech

14:30 – 15:00

Transfer to Royal Academy of Sciences (KVAB)

[Rue Ducale 1, 1000 Brussels](#)

[Buses provided](#)

15:00 – 17:00

SESSION G1: Posters

[KVAB](#)

Georgios Bariamis	Hydrological simulation of the Aliakmonas river under changing land cover conditions
Andreas Bauwe	Predicting dissolved reactive phosphorus in tile-drained catchments using a modified SWAT model
Natalja Čerkasova	The assessment of future ecosystem services related to water availability and water quality in the Lithuanian coastal zone
Lei Chen	Development of a universal calibration platform tool for watershed models using global optimization
Yi Hsuan Chen	Natural hydrological responses due to climate variation based on short-time series of a headwater catchment in Taiwan
Il-Moon Chung	Estimation of hourly peak flow by combining SWAT simulation and Sangal's method in the Han River basin, Korea
Miha Curk	Redefining water protection measures on an alluvial plain with shallow soil in Slovenia
Anna Maria De Girolamo	Modelling management practices to reduce soil erosion in an agricultural watershed in Southern Europe
Vanessa Dos Santos	Surface runoff management modelling in dry valleys (Upper Normandy, France)
Thais Fujita	Assessment of the SWAT model for downscaled future climate scenarios for the Ivaí River Basin
Josiclêda Galvncio	Application of the SUPer system for the basins of Pontal and Brígida in the state of Pernambuco, Brazil
Josiclêda Galvncio	Analysis of climate and soil occupation impacts on surface runoff of the Pontal watershed in Pernambuco, Brazil
Matjaž Glavan	Effects of water protection regime on nitrogen leaching in Dravsko polje, Slovenia

Mekonnen Daba Habtemariam	SWAT Simulated Hydrological Response to Climate Change Impacts in Upper Awash Sub-basin, Awash Basin, Ethiopia
Stefan Julich	Monitoring and Modelling Set up to assess the impacts of Short rotation coppices on the site water balance
Chul-gyum Kim	Future prospect of dam inflow based on user-centered multiple GCMs and downscaling techniques
Chul-gyum Kim	Using SWAT watershed modeling to analyze the relationship between water balance components in Jeju Island of Korea
Seong Joon Kim	Hydrological analysis of environmental changes in the reservoir using SWAT model
Ervin Kosatica	A conceptual framework to analyze ecosystem services with a physically based eco-hydrological model SWAT
Jeongwoo Lee	Assessment of effects of agricultural reservoirs on the flow regime in a small rural catchment
Jeongwoo Lee	Impacts of water withdrawal and release on streamflow in the Anseongcheon watershed, Korea
Jeong Eun Lee	Assesment of flood alterations by dam using SWAT simulation in the Han River basin, Korea
Jeongwoo Lee	Evaluation of the modified SWAT with variable time of concentration
Ruimin Liu	Uncertainty analysis of SWAT model based on land use change in Xiangxi River Watershed, China
Ronalton Machado	Impacts of Land-Use and Climate Changes on Hydrologic Processes in the Piracicaba River Basin, Brazil
Rebeca Martínez	Effect on Water Quantity and Quality Under Land Use Scenarios in South Central Chile
Veronica Minaya	Nutrient modelling and land use assessment using the Soil and Water Assessment Tool (SWAT), case study: Coca River Basin
Rodrigo Miranda	Water balance of the Northern Axis Basins of the São Francisco River Transposition area using the SWAT model
Eugenio Molina-Navarro	SWAT2lake: A QGIS tool to tailor SWAT watershed delineations to waterbodies
Suzana Montenegro	Evaluation of TRMM Products and Their Use in Hydrological Modelling Over Pirapama River Basin, Pernambuco, Brazil
Suzana Montenegro	Identification of Critical Erosion Watersheds for Control Management Using the SWAT Model for Pirapama River Basin, Brazil
Suzana Montenegro	Effects of Scenarios of Land Use and Cover on Streamflow and Sediment Yield: A Case Study of Peixe River Basin, Brazil
Subira Munishi	Assessment of Water Availability and Uses in Kilombero Basin, Tanzania

Van Tam Nguyen	Flood Routing in the Soil and Water Assessment Tool: A Review
GM Jakirullah Nooruddin	The concurrent effects on land use conversions and local geomorphological features on Nitrate level to the regulation of fresh water quality.
Joanna O'Keeffe	Assessment of climate change impact on water temperature of rivers in Poland
Valeriy Osypov	The Desna river daily multi-site streamflow modeling using SWAT with detail snowmelt adjustment
Julio Perez-Sanchez	Modeling the impact of climate change on water resources in the headwaters of the Tagus river basin
Julio Perez-Sanchez	Impacts of land use change and climate variability on water resources in the headwaters of the Segura River Basin (SE Spain)
José Miguel Sánchez Pérez	Predicting particulate and dissolved organic carbon exports in watersheds at global scale
José Miguel Sánchez Pérez	An integration of landscape units in the SWAT-LUD model to better predict water discharge in the Amazon River
José Miguel Sánchez Pérez	Modeling of Suspended Sediment Load combining the SWAT model and Suspended Particulate Matter using Landsat-8 OLI data: The case of the Orinoco River - Venezuela
José Miguel Sánchez Pérez	Analysis of Sediment and Carbon Fluxes: A study of Ganga-Brahmaputra Basin
Sabine Sauvage	Quantifying the role of Amazonian wetlands in denitrification process and greenhouse gases outgassing patterns by using L-band remote sensing earth observations and SWAT modelling.
Sabine Sauvage	Investigating the Role of Wetlands in the Hydrology of the Congo River Basin Using the SWAT Model
Zhenyao Shen	Identification key sensitive parameters for Soil and Water Assessment Tool at multiple temporal scales
Mesfin Tolera	Groundwater Recharge Estimation in Little Akaki Watershed using SWAT Model

17:00 – 19:00

Tours

Brussels highlights of the city centre (2hrs): Discover Brussels through a walk, which will take you from the Royal district to the historic centre, with its Grand-Place of Brussels, the Cathedral of Saints Michael and Gudula, the Royal Saint-Hubert Galleries, the Saint-Gery square, the Sablon square, and Manneken Pis.

Beer tour with tastings (2 hrs): Let's dive into Brussels beers, breweries and taverns. Your guide will show you some old taverns in some hidden streets of the city centre. You will taste some beers in a special atmosphere.

Comic strip walk (2hrs): Brussels is known as the capital of comic strip, the heroes has taken possession of the walls, follow the guide and raise your eyes to discover them during this walk. Don't miss the painting of the famous Tintin!

Mystery and Legends tour (2hrs): Discover the legends of Brussels through it symbols and enigmatic images engraved on the façades left from architects, sculptors and find out the secrets hidden behind with your guide.

Friday, September 21

9:00 – 10:30	SESSION H1: Sediment, Nutrients, and Carbon Building D.2.16	Moderator: Mijail Arias Hidalgo, ESPOL, Ecuador
9:00 – 9:20	Jari Koskiaho	SWAT nutrient calibration and validation with a 6-year data set of continuous data in a Finnish catchment
9:20 – 9:40	Ilyas Masih	Simulation of sedimentation rates using the SWAT model: A case study of the Tarbela Dam, Upper Indus Basin.
9:40 – 10:00	Juan Luis Lechuga Crespo	Analysis of factors affecting sediment yield in catchments draining to the Cantabrian Sea (West Europe)
10:00 – 10:20	Juan Luis Lechuga Crespo	Evaluation of the precipitation time-step influence in streamflow and suspended sediment yield using SWAT in a small forested headwater catchment
9:00 – 10:30	SESSION H2: Hydrology Building D.2.18	Moderator: Raul Vazquez, University of Cuenca, Ecuador
9:00 – 9:20	Eugenio Molina-Navarro	SWAT vs. SWAT-MODFLOW in lowland catchments: Comparison of performance and simulation of groundwater abstraction scenarios.
9:20 – 9:40	Abolanle Elizabeth Odusanya	Simulating stream flow using an eco-hydrological model calibrated with global land surface evapotranspiration from remote sensing data
9:40 – 10:00	Kim Loi Nguyen	Integrating SWAT and HEC-RAS Models for Flood Forecasting in Vu Gia- Thu Bon River Basin, Vietnam
10:00 – 10:20	Kim Loi Nguyen	Analyzing spatial and temporal variation of water balance components in La Vi catchment, Binh Dinh province, Vietnam

Friday, September 21

9:00 – 10:30	SESSION H3: Climate Change Applications Building D.2.19	Moderator: Michael Strauch, UFZ-Helmholtz Centre for Environmental Research
9:00 – 9:20	Mohd Syazwan Faisal Bin Mohd	Assessment of Impact of Climate Change on Water Resources in Sungai Muda Watershed using Soil and Water Assessment Tools (SWAT)
9:20 – 9:40	Saeid Ashraf	Climate change impacts on glaciers and runoff in Alpine catchments
9:40 – 10:00	Saeid Ashraf Vaghefi	Using big data sets to combat climate change impacts
10:00 – 10:20	Mohammad Hashim	Simulation of hydrological processes of Sot river watershed in western Uttar Pradesh- a case study of sambhal district
10:30 – 11:00	COFFEE BREAK	
11:00 – 12:30	SESSION I1: Environmental Applications Building D.2.16	Moderator: Winfred Mbungu, Sokoine University of Agriculture, Tanzania
11:00 – 11:20	Dennis Trolle	A web platform to activate an operational forecast mode for existing SWAT setups
11:20 – 11:40	Rodrigo Miranda	Evaluation of water resources of the Mundaú basin using the SWAT model
11:40 – 12:00	Md. Ariful Islam	Uncertainty Analysis in Real-Time Flood Forecasting; a Case Study of Dender River flooding, November – 2010, Belgium

Friday, September 21

11:00 – 12:30	SESSION I2: Climate Change Applications Building D.2.18	Moderator: Subira Eva Munishi, UDSR, Tanzania
11:00 – 11:20	Philip Gassman	The Application of SWAT for Developing Climate Model Evaluation Metrics within a Heirarchical Framework
11:20 – 11:40	Anastassi Stefanova	Assesment and comparison of socio-economic and climate change impacts on water resources in four European lagoon catchments
11:40 – 12:00	Victor Ella	Assessing the Impacts of Climate Change on Dependable Flow and Potential Irrigable Area Using the SWAT model: The Case of Maasin River Watershed in Laguna, Philippines
12:00 – 12:20	Carlos Antonio Fernandez Palomino	Evaluation of future climate change impacts on hydrologic processes in the Peruvian Altiplano region using SWAT
11:00 – 12:30	SESSION I3: Hydrology Building D.2.19	Moderator: Faith Githui, Department of Economic Development, Australia
11:00 – 11:20	Georgios Bariamis	Hydrologic response to land use changes in Upper East Fork White River
11:20 – 11:40	Faith Githui	Overcoming the challenges in hydrological modelling of irrigated catchments in SE Victoria
11:40 – 12:00	Isared Kakarndee	Application of SLEEP and SWAT models for estimating streamflow with incomplete soil data in Krasioa basin, Thailand
12:00 – 12:20	Ekasit Kositsakulchai	Simulation of runoff changes based-on land use/cover in Lam Pachi basin by CA-Markov and SWAT models

Friday, September 21

12:30 – 13:30

LUNCH

VUB Cafeteria

13:30 – 15:00

SESSION J1: Model Development

[Building D.2.16](#)

Moderator: Jeff Arnold,
USDA-ARS

13:30 – 13:50

Celray James Chawanda

Easy to Use Workflows for Catchment Modelling:
Towards Reproducible Model Studies

13:50 – 14:10

Martin Lacayo

SWAT Interoperability Using Web Service Workflows

14:10 – 14:30

Juan Luis Lechuga Crespo

Developing a hydrogeochemical model for
implementation in SWAT model at the global scale

14:30 – 14:50

Seonggyu Park

Coupling the SWAT+ and MODFLOW codes for
enhanced surface / subsurface flow modeling in
watersheds

13:30 – 15:00

SESSION J2: Climate Change Applications

[Building D.2.18](#)

Moderator: Anastassi
Stefanova, UFZ-Helmholtz
Centre for Environmental
Research

13:30 – 13:50

Josiclêda Galvancio

Using the SWAT model to simulate surface runoff
under climate changes conditions in the Pontal
watershed, Pernambuco, Brazil

13:50 – 14:10

Emmanuel Obuobie

SWAT-based simulation of climate change impact on
water and sediment inflow to Lake Volta in West
Africa

14:10 – 14:30

Nina Zarrineh

Assessing impacts of climate change on priorities for
land management strategies

14:30 – 14:50

Md. Ariful Islam

Climate Change Effects on Flooding: a case study of
flood, 2012 in Mighty Brahmaputra-Jamuna River at
Bogra District

Friday, September 21

13:30 – 15:00

SESSION J3: Hydrology
[Building D.2.19](#)

Moderator: Shreedhar
Maskey, UNESCO-IHE

13:30 – 13:50

David Rivas-Tabares

Crop rotation implications in water balance through
land use change scenarios using SWAT model

13:50 – 14:10

Srishti Singh

Web Based Water Resources Information System
Using SWAT model

14:10 – 14:30

Cheng Sun

The multiple imputation approaches for
interpolating rainfall data series and their
applications to watershed models

15:00 – 16:00

CLOSING SESSION
[Aula Qb](#)

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