

INTERNATIONAL SOIL  
AND WATER ASSESSMENT  
TOOL CONFERENCE

# SWAT 2019



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17-19 JULY  
VIENNA, AUSTRIA

AGENDA



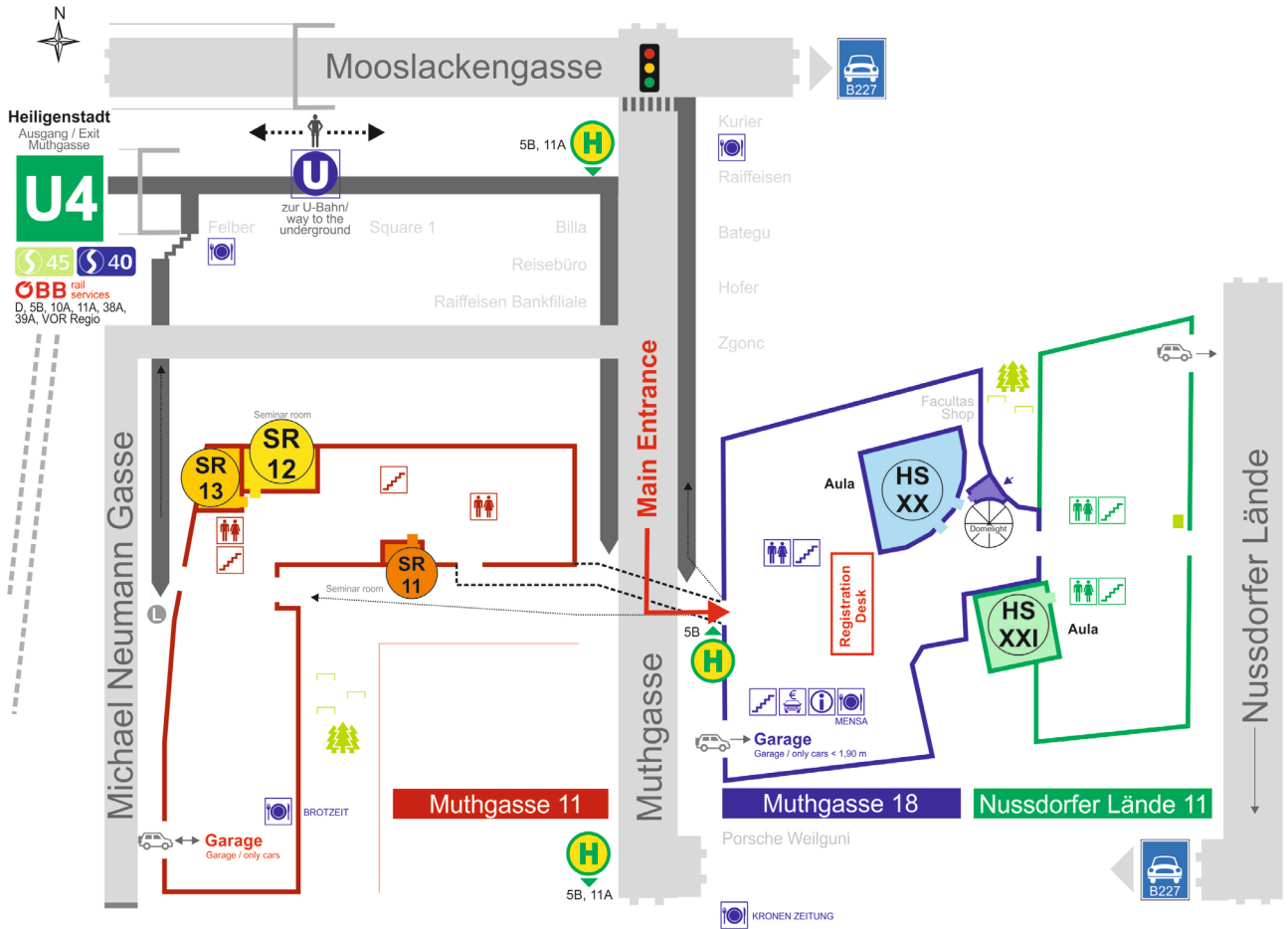
The Soil and Water Assessment Tool (SWAT) is a public domain model jointly developed by USDA Agricultural Research Service (USDA-ARS) and Texas A&M AgriLife Research, part of The Texas A&M University System.

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.

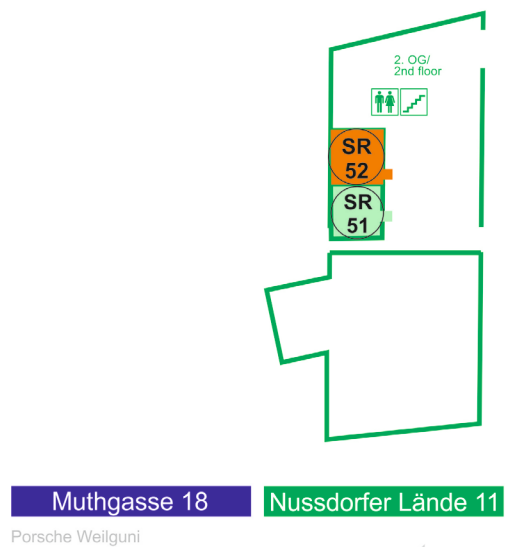
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# Muthgasse 11 and 18 - GROUND FLOOR



# Muthgasse 18 - SECOND FLOOR



# Conference Overview

Wednesday, July 17

8:00 – 9:00	Participant Check-in and Registration	Aula
9:00 – 10:30	Opening Ceremony	HS XX
10:30 – 11:00	Coffee Break	Aula
11:00 – 12:30	A1 SWAT+ A2 Sensitivity Calibration and Uncertainty A3 Hydrology A4 Sediment, Nutrients, and Carbon	HS XX SR 13 SR 12 HS XXI
12:30 – 12:45	Group Photo	Aula
12:45 – 14:00	Lunch	Aula
14:00 – 15:30	B1 Hydrology B2 Model Development B3 Large Scale Applications B4 Climate Change Applications	HS XXI SR 12 HS XX SR 13
15:30 – 16:00	Coffee Break	Aula
16:00 – 19:00	C1 Posters	HS XX, Aula

### Thursday, July 18

9:00 – 10:30	D1	Model Development	SR 12
	D2	Hydrology	HS XXI
	D3	Environmental Applications	HS XX
	D4	Database and GIS Application and Development	SR 13
10:30 – 11:00	Coffee Break		Aula
11:00 – 12:30	E1	SWAT+	HS XXI
	E2	Climate Change Applications	SR 12
	E3	Environmental Applications	SR 13
12:30 – 14:00	Lunch		Aula
14:00 – 14:30	F1	SWAT+ Demo	HS XX
15:30 – 17:30	Stephansdom Tour		
19:00	Dinner Gala		

### Friday, July 19

9:00 – 10:30	G1	Hydrology	HS XXI
	G2	Large Scale Applications	SR 12
10:30 – 11:00	Coffee Break		Aula
11:00 – 12:30	H1	Environmental Applications	HS XXI
	H2	Hydrology	SR 12
	H3	Soil and Water Conservation Management	SR 13
12:30 – 14:00	Lunch		Aula
14:00 – 15:30	I1	Climate Change Applications	SR 12
	I2	Hydrology	HS XXI
	I3	Sediment, Nutrients, and Carbon	SR 13
15:30 – 16:30	Closing Session		HS XXI

# Wednesday, July 17

8:00 – 9:00	<b>PARTICIPANT CHECK-IN AND REGISTRATION</b> <a href="#">Aula</a>	
9:00 – 10:30	<b>OPENING CEREMONY</b> <a href="#">HS XX</a>	
9:00 – 9:15	<b>Günter Langergraber</b> , Head of Department of Water, Atmosphere and Environment, BOKU, Austria Welcome Address	
9:15 – 10:00	<b>Adam Kovacs</b> , ICPDR, Austria Quo vadis, Danubius? - Challenges of water quality management in a shared river basin	
10:00 – 10:30	<b>Jeff Arnold</b> , USDA-ARS, USA Model Development	
10:30 – 11:00	<b>COFFEE BREAK</b> <a href="#">Aula</a>	
11:00 – 12:30	<b>SESSION A1: SWAT+</b> <a href="#">HS XX</a>	<b>Moderator:</b> Jeff Arnold, USDA-ARS, USA
11:00 – 11:20	Katrin Bieger	Overview of SWAT+ options for simulating groundwater processes
11:20 – 11:40	David Bosch	SWAT+ Estimates of Peak Flows for a Coastal Plain Watershed
11:40 – 12:00	Celray James Chawanda	Africa SWAT+ Model for Climate Change and Land Use Change Studies
12:00 – 12:20	Albert Nkwasa	How can we represent seasonal land use dynamics in SWAT and SWAT+ models for African cultivated catchments?

11:00 – 12:30	<b>SESSION A2: SENSITIVITY CALIBRATION AND UNCERTAINTY</b> <a href="#">SR 13</a>	<b>Moderator:</b> Karsten Schulz, BOKU, Austria
11:00 – 11:20	Seonggyu Park	IPEAT+: FORTRAN-based Automatic Calibration Tool Coupled with SWAT+
11:20 – 11:40	Seonggyu Park	Framework for quantifying uncertainty, sensitivity, and estimating parameters for SWAT+ with MODFLOW routines
11:40 – 12:00	Deepak Khare	Sensitivity Analysis of Runoff Using SWAT: a Case Study of Large Mountainous Watershed in North India
12:00 – 12:20	Bhumika Uniyal	Regional Irrigation Water Demand: Addressing Uncertainties for Better Prediction
11:00 – 12:30	<b>SESSION A3: HYDROLOGY</b> <a href="#">SR 12</a>	<b>Moderator:</b> José María Bodoque, University of Castilla-La Mancha, Spain
11:00 – 11:20	José María Bodoque	Calibration and validation in hydrologically altered basins: A case study involving the SWAT and AQUATOOL models in the Iberian Peninsula
11:20 – 11:40	Deepak Khare	Hydrological Simulation of a Small Tropical Watershed in Central India Using SWAT
11:40 – 12:00	Wonjin Kim	Assessment of Decades Groundwater Use, Forest Growth and Soil Loss Impacts on Watershed Hydrology of Geum River Basin in South Korea using SWAT
12:00 – 12:20	R. Manjula	Study on Impact of Land-Use Changes on Surface Runoff Modeling in Lower Thamirabarani Sub-Basin





# Wednesday, July 17

14:00 – 15:30	<b>SESSION B1: HYDROLOGY</b> <a href="#">HS XXI</a>	<b>Moderator:</b> Mamaru Ayalew Moges, Bahir Dar University, Ethiopia
14:00 – 14:20	George Akoko	Evaluating Irrigation Water Resources Availability and Climate Change Impacts on Scheme Management – Case Study of Water Balance Simulation of Mwea Irrigation Scheme, Kenya
14:20 – 14:40	Tracy Baker	Using SWAT to assess potential hydropower impacts downstream in a data scarce region: Gabon case study
14:40 – 15:00	Jeehun Chung	SWAT Hydrological Simulation of Gongdo Agricultural Watershed in South Korea Using SM2RAIN Rainfall Derived from AMSR-E Satellite Images
15:00 – 15:20	Jin Uk Kim	SWAT Agricultural Reservoir Operation Modeling for Release of Paddy Irrigation Water and Environmental Flow in Gongdo Rural Watershed of South Korea
14:00 – 15:30	<b>SESSION B2: Model Development</b> <a href="#">SR 12</a>	<b>Moderator:</b> Jaehak Jeong, Texas A&M AgriLife Research, USA
14:00 – 14:20	Ryan Bailey	SWAT-MODFLOW: Recent Applications and an Introduction to Version 3
14:20 – 14:40	Ryan Bailey	Enhancing SWAT+ groundwater flow simulation using MODFLOW routines
14:40 – 15:00	R. Manjula	Review on SWAT Integrated Models and Their Applications in Surface and Subsurface Flows
15:00 – 15:20	Carolynne Andrade	Climate Change Impacts on Hydrological Processes in Representative Basin of Brazilian Semiarid

# Wednesday, July 17

14:00 – 15:30	<b>SESSION B3: Large Scale Applications</b> HS XX	<b>Moderator:</b> Michael White, USDA-ARS, USA
14:00 – 14:20	Michael White	Development of a National SWAT+ Model for the US: Progress and Challenges
14:20 – 14:40	Dennis Trolle	Introducing “A Scalable wAter Prognosis” (ASAP): a plug-and-play web platform for operational SWAT forecasts
14:40 – 15:00	Natalja Čerkasova	High-resolution large-scale modeling framework for a transboundary watershed: a climate change assessment of nutrient loads and possible environmental consequences
15:00 – 15:20	Cibin Raj	Computationally efficient calibration strategies for complex large-scale SWAT applications
14:00 – 15:30	<b>SESSION B4: Climate Change Applications</b> SR 13	<b>Moderator:</b> Mikołaj Piniewski, Warsaw University of Life Sciences, Poland
14:00 – 14:20	Ann van Griensven	Climate change impacts on crop water productivity across Africa
14:20 – 14:40	Howard Van Meer	Analysis of climate scenarios and effects on water availability for irrigation in Río Dulce irrigation system, Santiago del Estero, Argentina
14:40 – 15:00	Sehoon Kim	Assessment of Future Agricultural Water Supply Capacity Under Extreme Climate Condition of Geum River Basin Using MODSIM-DSS Model
15:00 – 15:20	So Young Woo	Establishment of Climate Change Adaptation Strategy of Stream Flow and Water Quality Maintenance for A Watershed Receiving Water from Neighbor Watershed
15:30 – 16:00	<b>COFFEE BREAK</b> Aula	

16:00 – 19:00

## SESSION C1: POSTERS

HS XX, Aula

Finger food and drinks served at 17:00

### BMPs

1	Miha Curk	Water protection in a vulnerable agricultural area - the soil type based approach
2	Raju Gurung	Enhancement of degraded watershed through Restoration (plantation) and its effects on stream-flow in West Seti Watershed in Nepal
3	Adrián López-Ballesteros	Modeling the impacts of best management practices on water quality of El Beal wadi (SE Spain)
4	Hui Xie	Probabilistic approach for uncertainty-based optimization of best management practices under multiple types of rainfall-runoff events
5	Seyedeh Nayyer Mirnasl Bonab	Investigating the Impact of Crop Rotation at Different Levels of Implementation and Spatial Distribution on the Total Phosphorus Loading Using the SWAT Modeling Tool

### Climate Change Applications

6	Dereje Birhanu	Combined impacts of future climate and land use changes on hydrological process of Upper Awash River Basin, Central Ethiopia
7	Yi-Hsuan Chen	The hydrological characteristics of Hehuan Mountain watershed and impact assessment of climate variation
8	Chul-gyum Kim	Evaluation of future climate change impact on the inflow of Chungju Dam during flood season using multiple GCMs and SWAT model
9	Javier Senent Aparicio	Impact of climate change on water resources in the Guajoyo River Basin (El Salvador)
10	Javier Senent Aparicio	Assessing the impact of climate change for Aracthos river basin (NW Greece) using SWAT model
11	Zhenyao Shen	Impacts of climate change on watershed systems and potential adaptation through BMPs in a drinking water source area

## Database and GIS Application and Development

- |    |                        |  |
|----|------------------------|--|
| 12 | Eugenio Molina-Navarro | SWAT as an educational resource at the University of Alcalá: Expanding the SWAT community in Spain by teaching |
| 13 | GeonWoo Park           | Evaluation of Baseflow and Lateralflow using measured Slope and Slope length at Doam Dam Watershed             |

## Environmental Applications

- |    |                   |   |
|----|-------------------|---|
| 14 | Natalja Čerkasova | Development of framework for the application of coastal, riverine, environmental and socio-economic modeling tools to predict the values of indicators for Ecosystem Services |
| 15 | Jan Gregar        | The Proposal of Management of Bathing Water Reservoir for Elimination of Eutrophication   |
| 16 | Stefan Julich     | Simulation of the water supply of Short Rotation Coppices on sandy fields   |
| 17 | Chong Li          | Comparing SWAT and InVEST models on water conservation calculation  |
| 18 | Ruimin Liu        | Dynamic water environmental capacity calculation based on SWAT model under the changing environment   |
| 19 | Yifan Wu          | Impact of Land Use Change on streamflow by linking the CA-Markov and SWAT models  |

## Hydrology

- |    |                         |  |
|----|-------------------------|--|
| 20 | Dawd Ahmed              | Effects of Land Use Land Cover Change on Stream Flow (Case of Wabe Watershed, Omo-Gibe Basin, Ethiopia)                              |
| 21 | Carolynne Andrade       | Modeling runoff and evapotranspiration responses to land use changes using SWAT model in the Mundaú watershed, Brazil                |
| 22 | José María Bodoque      | Application of the SWAT model and remote sensing techniques to assess flooding in basins of the Pampas region                        |
| 23 | Lei Chen                | Evaluating spatial scaling effect of baseflow and baseflow nonpoint source pollution in a typical nested watershed                   |
| 24 | Il-Moon Chung           | A long-term water balance analysis of urban watershed in Korea   |
| 25 | Amine Larabi            | Improved simulation of groundwater-surface water interactions between oasis and catchment systems in Morocco using MODFLOW and SWAT+ |
| 26 | Jeong Eun Lee           | Estimation of hourly peak flows at multi-sites using SWAT in the Chungju Dam watershed, Korea  |
| 27 | Francis Kilundu Musyoka | Evaluation of the SWAT model performance for a small agricultural catchment in Austria   |

28	Julio Perez-Sanchez	Using SWAT and the chloride mass balance method to improve the modelization of basins under significant groundwater exchanges
29	Carlos Zuleta Salmon	An integrated GIS and SWAT model approach to assess past, present and future land use changes and related water management impacts in the upper Amazon region of Ecuador
30	Jeongwoo Lee	Combined use of SWAT and ANN models for hourly peak flow estimation in Chungju Dam watershed, South Korea
31	Hyungjin Shin	Analysis of agricultural drought through hydrological analysis of agricultural reservoir watershed
32	Emily Su	Impact of headwater stream burial on downstream processes within Kemptville Creek subwatershed in Ontario, Canada
33	Michał Jasik	Effect of reforestation after the decay of spruce stands on the hydrological conditions of the Leśniana and Malinowski Stream catchments in the Silesian Beskid

## Large Scale Applications

34	Jörg Dietrich	Modelling a semi-arid catchment with a large number of horizontally connected reservoirs in Brazil
35	Nina Noreika	Application of SWAT model to assess hydrological balance and mass transport within medium size catchments
36	Dongseok Yang	Analysis of Pollutants Load from Nationwide agricultural Fields Considering Future Climate and Seasonal Prediction Using Model APEX

## Model Development

37	Jungang Gao	Design and development of a Python-based interface for processing massive data with the Load Estimator (LOADEST)
38	Cong Wang	Simulation of nitrous oxide emissions in typical agricultural catchments in Austria

## Pesticides, Bacteria, Metals, and Pharmaceuticals

39	Kyunghwa Cho	Assessing Influence of climate change on the fate and transport of fecal coliform bacteria using the modified SWAT model
40	Sebastian Gebler	Landscape level exposure assessment of pesticide concentration at drinking water abstraction points – a study on spatio-temporal controls using SWAT.

## Sediment, Nutrients, and Carbon

- 41 Matjaž Glavan Integrated water quality management model for rural cross-border river basin:  
The case of Sotla/Sutla river

## Sensitivity Calibration and Uncertainty

- 42 Yosuke Horie Parameter estimation in SWAT with ensemble Kalman filter considering  
characteristics of ordinary and rainfall flow

9:00 – 10:30

**SESSION D1: MODEL DEVELOPMENT**  
SR 12

**Moderator:** Cibin Raj,  
Purdue University, USA

9:00 – 9:20

Cibin Raj

Re-conceptualizing HRU threshold definition in the Soil and Water Assessment Tool

9:20 – 9:40

Andreas Bauwe

SWAT-P: A modified SWAT model to simulate dissolved reactive phosphorus in tile-drained landscapes

9:40 – 10:00

Ryan Bailey

APEX-MODFLOW: new integrated model to simulate water and nutrient transport at the watershed scale

10:00 – 10:20

Ryan Bailey

Assessing Salt Ion Fate and Transport in Arid Regions using SWAT-Salt

9:00 – 10:30

**SESSION D2: HYDROLOGY**  
HS XXI

**Moderator:** Christine Stumpp, BOKU, Austria

9:00 – 9:20

Eugenio Molina-Navarro

Estimating the hydrological impacts of droughts in California using SWAT: the Tijuana River Basin

9:20 – 9:40

Eugenio Molina-Navarro

SWAT-MODFLOW implementation at a highly drained agricultural catchment in Denmark

9:40 – 10:00

David Rivas-Tabares

Self-Organizing Maps of soil properties for improved hydrological modeling

10:00 – 10:20

Tibebe Tigabu

Modelling the flow dynamics of groundwater-surface water interactions of the Lake Tana Basin, Upper Blue Nile, Ethiopia.

9:00 – 10:30	<b>SESSION D3: ENVIRONMENTAL APPLICATIONS</b> HS XX	<b>Moderator:</b> Michael Strauch, Helmholtz Centre for Environmental Research - UFZ, Germany
9:00 – 9:20	Mikolaj Piniewski	How increased nutrients and organic carbon recovery and reuse may affect their emissions to water bodies? A framework based on three Baltic case studies
9:20 – 9:40	Michael Strauch	Land use optimization based on modeling, metaheuristics, and multi-criteria decision analysis.
9:40 – 10:00	Anders Nielsen	Water Ecosystems Tool (WET): a way to simulate water quality in lakes and reservoirs from SWAT simulated watershed outputs
10:00 – 10:20	Paweł Wielgat	Using the SWAT model in monitoring the impact of agricultural practices on the basin of Puck Bay in Poland- application WaterPUCK.
9:00 – 10:30	<b>SESSION D4: DATABASE AND GIS APPLICATION AND DEVELOPMENT</b> SR 13	<b>Moderator:</b> Balaji Narasimhan, IIT Madras, India
9:00 – 9:20	Balaji Narasimhan	Development and testing of high-resolution global soil database for improved hydrologic model prediction
9:20 – 9:40	Petr Krpec	Using digital soil mapping for SWAT soil input data, case study from small scale watershed (Czech Republic)
9:40 – 10:00	Rohit Goyal	Identification of Relationships among Morphometric Parameters and QSWAT Model Output
10:00 – 10:20	Pier Andrea Marras	CESApp: an Earth Observation Product for pollution monitoring based on Swat and Swat-HM module
10:30 – 11:00	<b>COFFEE BREAK</b> Aula	



11:00 – 12:30	<b>SESSION E1: SWAT+</b> HS XXI	<b>Moderator:</b> Katrin Bieger, Texas A&M AgriLife Research, USA
11:00 – 11:20	Celray James Chawanda	IPEAT+ UI: An Automatic Calibration Tool with User Interface for SWAT+
11:20 – 11:40	Joanna O Keeffe	Utilizing SWAT+ for ecohydrological and climate change studies
11:40 – 12:00	Marta Księżniak	Influence of Wetland component in SWAT+ used for the Upper Biebrza catchment model
12:00 – 12:20	Kaoutar Badioui	Simulation of Dates Palm Trees in the Boudenib Oasis in Morocco using SWAT+ and Remote Sensing Data
11:00 – 12:30	<b>SESSION E2: CLIMATE CHANGE APPLICATIONS</b> SR 12	<b>Moderator:</b> Andreas Bauwe, University of Rostock, Germany
11:00 – 11:20	Lingfeng Zhou	A frequency-domain nonstationary multi-site rainfall generator for use in hydrological impact assessment
11:20 – 11:40	Richard Dallison	Impacts of climate change on water quantity and quality in the Dyfi Catchment, UK: Implications for drinking water supply
11:40 – 12:00	Nina Zarrineh	Climate and land use management changes on the provision of multiple ecosystem services in Western Switzerland – Are there risks of maladaptation?
12:00 – 12:20	Balaji Narasimhan	Retrieval of Land Cover Management Practices Information for SWAT Model at a National scale for India

11:00 – 12:30	<b>SESSION E3: ENVIRONMENTAL APPLICATIONS</b> SR 13	<b>Moderator:</b> Stefan Julich, TU Dresden, Germany
11:00 – 11:20	Dominika Kalinowska	Hydrological forecast model of the Puck community in Poland
11:20 – 11:40	Yonggwon Lee	Evaluation of Land Use Change Impact on Hydrology and Water Quality in Geum Reiver Basin by Indexing Watershed Health
11:40 – 12:00	Cong Men	Characteristics of heavy metals from nonpoint source in an urban watershed under the rapid urbanization
12:00 – 12:20	Yaobin Meng	Uncertainty based metal budget assessment at the watershed scale: A coupled SWAT-Heavy Metal model (SWAT-HM)
12:30 – 14:00	<b>LUNCH</b> Aula	
14:00 – 14:30	<b>SESSION F1: SWAT+ DEMO</b> HS XX	
15:30 – 17:30	<b>STEPHANDSDOM TOUR</b>  Meet at the Stephansdom at 15:30  Wiener Stephansdom Stephansplatz 3 1010 Vienna	
19:00	<b>DINNER GALA</b>  By invitation of the Mayor of the City of Vienna  Wiener Rathauskeller Rathausplatz 1 1010 Vienna	

# Friday, July 19

9:00 – 10:30	<b>SESSION G1: HYDROLOGY</b> <a href="#">HS XXI</a>	<b>Moderator:</b> Peter Allen, Baylor University, USA
9:00 – 9:20	Yongwon Kim	SWAT Watershed Modeling of Inter-Basin Water Transfer for Dealing with Water Dispute between Basins
9:20 – 9:40	Wenzhuo Wang	Is returning farmland to forest an effective measure across spatial scales?
9:40 – 10:00	Jiwan Lee	Evaluation of stream flow and water quality behavior by weir operation in Nakdong river basin using SWAT
10:00 – 10:20	Ismail Adal Guiamel	Watersheds Modeling of Mindanao River Basin in the Philippines using the Soil and Water Assessment Tool (SWAT) for Water Resources Management
9:00 – 10:30	<b>SESSION G2: LARGE SCALE APPLICATIONS</b> <a href="#">SR 12</a>	<b>Moderator:</b> Dennis Trolle, Aarhus University, Denmark
9:00 – 9:20	Odile Leccia-Phelpin	Assessing SWAT model performance using gridded SAFRAN/ CFSR and conventional weather station datasets at different hydro-meteorological spatial and temporal resolutions - A case study on the 10,000 km <sup>2</sup> Charente river basin S-W France
9:20 – 9:40	Anna Malago'	Water quality modelling at continental scale using the SWAT model
9:40 – 10:00	Yonggui Wang	Modelling the Spatiotemporal Patterns of Hydrology Processes and Non-point Source Pollution with SWAT in the Three Gorges Reservoir Area, China
10:00 – 10:20	Insaf Mekki	SWAT to model the the ecosystem services in the small agricultural Lebna watershed (Cap Bon, Tunisia).
10:30 – 11:00	<b>COFFEE BREAK</b> <a href="#">Aula</a>	

11:00 – 12:30	<b>SESSION H1: ENVIRONMENTAL APPLICATIONS</b> HS XXI	<b>Moderator:</b> Nicola Fohrer, Christian-Albrechts- University Kiel, Germany
11:00 – 11:20	Hamed Vagheei	Application of SWAT Model in Eco-hydrological Assessment of the Clariano River
11:20 – 11:40	Howard Van Meer	Simulation of green and blue water impacts on rainfed sugarcane under different management regimes in Salí-Dulce catchment, northern Argentina
11:40 – 12:00	Qingrui Wang	The effects of land use change on non-point source pollution simulation using SWAT model
12:00 – 12:20	Yang Xu	The evaluation of propagation from meteorological drought to hydrological and agricultural drought under climate change using SWAT model
11:00 – 12:30	<b>SESSION H2: HYDROLOGY</b> SR 12	<b>Moderator:</b> Ryan Bailey, Colorado State University, USA
11:00 – 11:20	Wonjin Jang	Evaluation of Crop-specialized Multi-objective PSO Auto-Calibration Algorithm in Haean Watershed of South Korea
11:20 – 11:40	Zsolt Jolankai	Evaluation of 3D soil hydraulic data using the SWAT model on the Zala and Kapos catchments, Hungary
11:40 – 12:00	İsmail Bilal Peker	Application of SWAT in a mountainous region in Turkey using remote sensing data
12:00 – 12:20	Davy Sao	Assessment of Stream Flow Variability in Pursat River Basin of Cambodia using SWAT Model

11:00 – 12:30	<b>SESSION H3: SOIL AND WATER CONSERVATION MANAGEMENT</b> <a href="#">SR 13</a>	<b>Moderator:</b> Bano Mehdi, BOKU, Austria
11:00 – 11:20	Damiano Baldan	Assessing the potential impact of natural small water retention measures on in-stream siltation risk and habitat conditions with an integrated modeling cascade
11:20 – 11:40	Jiali Qiu	Evaluating the performance of conservation practices under climate change scenarios in the Miyun Reservoir Watershed, China
11:40 – 12:00	Tadesse A. Abitew	A climate-based prognostic LAI modeling in SWAT+ for tropics and subtropical region
12:30 – 14:00	<b>LUNCH</b> <a href="#">Aula</a>	
14:00 – 15:30	<b>SESSION I1: CLIMATE CHANGE APPLICATIONS</b> <a href="#">SR 12</a>	<b>Moderator:</b> Javier Senent Aparicio, UCAM, Spain
14:00 – 14:20	Rana Ammar Aslam	Assessment of the Impact of climate change on groundwater recharge in Lahore, Pakistan using modeling approach
14:20 – 14:40	Rimuka Bloodless Dzwairo	SWAT-based Integrated Water Management Model for Selected Watersheds of BIS Countries Under Climate Change Scenarios
14:40 – 15:00	Nariman Mahmoodi	Modeling the impact of climate change on streamflow of an Iranian Wadi
15:00 – 15:20	Chanchai Petpongpan	Climate Change impact on Surface water and Groundwater resources in Northern Thailand

14:00 – 15:30	<b>SESSION I2: CLIMATE CHANGE APPLICATIONS</b> <a href="#">HS XXI</a>	<b>Moderator:</b> Tracy Baker, The Nature Conservancy, USA
14:00 – 14:20	Abolanle Elizabeth Odusanya	Evaluating the efficiency of using global actual evapotranspiration data from remote sensing in constraining hydrological model parameters for streamflow simulation at a catchment scale in West Africa
14:20 – 14:40	Mamaru Ayalew Moges	Satellite Based Climate Data for Water Resource assessment in scale of range of watersheds by Using SWAT, Upper Blue Nile Basin
14:40 – 15:00	Fereshteh Kordrostami	A multi-criteria framework to prioritize subbasins for adaptive water resources management in data scarce semi-arid regions
15:00 – 15:20	Giovanni Francesco Ricci	Soil Erosion Models at Regional and Watershed Scale Comparing SWAT, AnnAGNPS, PESERA, and RUSLE2015
14:00 – 15:30	<b>SESSION I3: CLIMATE CHANGE APPLICATIONS</b> <a href="#">SR 13</a>	<b>Moderator:</b> Andreas Klik, BOKU, Austria
14:00 – 14:20	Saravanan Subbarayan	Assessment of sediment inflow to a reservoir using the SWAT model for Changing Landuse conditions: A case study for Vaigai Reservoir, Tamilnadu, India
14:20 – 14:40	Linh Hoang	Estimating nutrient loss from a typical dairy farming catchment in New Zealand using SWAT
14:40 – 15:00	Andrianto Ansari	Modelling of Discharge and Sediment Transport in Terrace Paddy Fields Through the SWAT model. a Case study: Keduang sub-watershed, Wonogiri Regency, Central Java, Indonesia.
15:00 – 15:20	Nicola Fohrer	A guideline for consistent water quality modeling
15:30 – 16:30	<b>CLOSING SESSION</b> <a href="#">HS XXI</a>	



