

3rd OpenWater symposium and workshops

Addis Ababa, Ethiopia
September 16-17, 2015

Programme Day 1

Day 1/time	Presentation
8:30 - 9:00	Registration
9:00 - 9:30	Welcoming Ann van Griensven, Simon Langan and Semu Moges
9:30 - 10:30	Keynote talks (convener: Simon Langan) <i>Dr. Youssef, Filali-Meknassi UNESCO, Namibia.</i> Making the implicit, explicit: The HOPE Initiative, an example of Water Cooperation. <i>Fekahmed Negash, Nile Basin Initiative, Addis Ababa, Ethiopia.</i> Decision support systems for the Nile.
10:30-11:00	Coffee Break
	Session 1 - Invited talks (Convener: Ann van Griensven)
11:00-11:30	<i>Chris George (UK)</i> - "Can we trust what we get for free?"
11:30-12:00	<i>Prof. Tammo Steenhuis, USA</i> - Use of open source hydrology and erosion models in a humid monsoon climate
12:00-12:30	<i>Dr. Jeremiah Kiptala</i> - Modelling stream flow and quantifying blue water using a modified STREAM model for a heterogeneous, highly utilized and data scarce river basin in Africa
12:30-14:00	Lunch
	Session 2 - Invited talks (convener: Semu Moges)
14:00 - 14:30	<i>Lisa-Maria Rebelo, Laos</i> - Water Accounting.Org: An open access platform for water resources management
14:30-15:00	<i>prof. Yasir Mohamed, Sudan</i> and <i>prof. Wim Bastiaanssen, Netherlands.</i> Water accounting at a river basin scale: the Nile Basin case
15:00-15:30	<i>Gert Mulder</i> and <i>Wim Bastiaansen, Netherlands</i> Development of water accounting software based on satellite data, to automate the generation of water accounts worldwide
15:30-15:50	<i>prof. Dirk Raes, Belgium</i> - AquaCrop – a crop water productivity model
15:50-16:20	Coffee Break + Posters
	Session 3 - Invited talks (convener: Lisa-Maria Rebelo)
16:20-16:30	<i>Meena Muraree.</i> Water Sharing in Eastern-Nile River Basin: A Geopolitical Perspective of Conflict to Cooperation
16:50-17:10	<i>Mahsa Motlagh</i> Opportunities for sustained, inclusive trans-boundary cooperation among Eastern Nile riparian countries – A study of applied experimental games
17:10-17:30	<i>Dr. Mohamed Elshamy,</i> Applications of the Analytical Tools focusing on the modeling part as we see this will be beneficial for the audience of such symposium
17:30-17:50	<i>Dr. Sirak Gebrekristos, Stefan Uhlenbrook, Hubert Savenije, Yasir Mohamed and Jochen Wenninger.</i> Catchment modelling through the use of Stable Isotope data and field observations in the Chemoga and Jedeb meso-scale catchments, Abay/Upper Blue Nile basin, Ethiopia
19:00	Conference dinner



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Programme Day 2

Day 2/time	Presentation
	Session 4A - DSS and optimisation (convener: Yasir Mohamed)
9:00 -9:20	Niguse Abebe Hagos. Feasibility Study of Small Hydropower Schemes Using RETScreen as Decision Support Tool in Giba and Worie Subbasins of Tekeze River, Ethiopia
9:20 -9:40	Solomon Seyoum and Badruz Zaman. Optimizing Best Management Practices configurations for retrofitting of Urban Stormwater Drainage Systems using open source Tools
9:40-10:00	Habtam A. Mekonen. Multipurpose water resources planning and management using Nile basin DSS in the Tana sub-basin, Ethiopia.
10:00-10:20	Fikadu Worku, Micha Werner, Pieter van der Zaag and Nigel Wright. Integrated operation management of multipurpose cascade reservoirs for optimal water allocation, a case of Omo-Ghibe basin
	Session 4B - Sediment transport & water quality (convener: Ann van Griensven)
9:00 -9:20	Getaneh K. Ayele. Economic valuation on participatory gully rehabilitation in the Ethiopian highland.
9:20 -9:40	Minbale Aschale, Yilma Sileshi, Mary Kelly-Quinn and Dereje Hailu. ICP-MS Determination of Potentially Toxic Trace Elements in Little Akaki River of Addis Ababa, Ethiopia.
9:40-10:00	Fasil Eregno, Torulv Tjomslund, Magdalena Kempa, Arve Heistad and Ingun Tryland. GEMSS Hydrodynamic Modelling Approach to Assess the Risk of Microbial Contamination of Recreational Water after Heavy Rainfall Event
10:00-10:20	Biniyam S. Applying Unstructured Grid model for tides in the Belgian continental shelf
10:20-11:00	Coffee Break
	Session 5A - Land use & climate change (convener: Tracy Baker)
11:00-11:20	Imeshi Weerasinghe, Boud Verbeiren, Marijke Huysmans, Sven Vanderhaegen, Frank Canters, Inge Uljee, Guy Engelen, Ingrid Jacquemin, Bernard Tychon, Harris Vangelis, George Tsakiris and Okke Batelaan. Using WetSpaSS to identify climate and land use change effects by assessing drought impacts on groundwater recharge
11:20-11:40	Mekuanent Mulune, Performance Analysis of Conceptual Rainfall-Runoff Models Under Extreme Conditions
11:40-12:00	Gashaw Gismu and Mamaru Ayalew. Evaluating the effect of historical climate change and land use/cover change on catchment hydrology of Gumara watershed, Upper Blue Nile basin, Ethiopia
12:00-12:20	Semu A. Moges, Dereje Liben, and Ann van Griensven. The Importance of Uncertainty Characterization in Climate Change Impact Studies: SWAT Modelling Approach in the Upper Blue Nile Basin
12:20-12:40	Mekonnen Daba. Evaluation potential impacts of climate change on surface water resource availability of upper Awash sub-basin, Ethiopia
	Session 5B - Water and sustainability (convener: Sirak Gebrekristos)
11:00-11:20	Yared Bayissa. Spatial and temporal assessment of historic drought events in Upper Blue Nile Basin of Ethiopia using multiple drought indices
11:20-11:40	KA Gebrehiwot. Optimizing Flood and Sediment Management of Spate Irrigation in Aba'ala Plains
11:40-12:00	Girma Yimer Ebrahim and Karen G. Villholth. Estimating groundwater availability at catchment scale using streamflow recession and instream flow requirements of rivers in South Africa
12:00-12:20	Tracy Baker, Timothy O. Williams and Yoro Sidibe. Potential impact of Foreign Direct Investment on water related ecosystem services: Baro-Gilo Basin Case Study
12:20-12:40	Seleshi Yalew, Walter Rossing, Felix Bianchi, Jeroen C.J. Groot and Luuk Fleskens. Modelling Trade-offs between Erosion Prevention and Other Ecosystem Services using the



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	Landscape IMAGES Framework
12:40-14:00	Lunch
	Session 6A - Tool developments (convener: Dirk Raes)
14:00-14:20	<i>Patricia Trambauer, Yasir Mohamed and Wim Bastiaanssen.</i> SEBAL 3.0: New features and open access implementation
14:20-14:40	<i>Dong Kwan Park, Getachew Tegegne and Young-Oh Kim.</i> Open Source Library for Integrated Model for climate Change Impact and Vulnerability Assessment – SNU-CAHL..
14:40-15:00	<i>Elga Salvatore, Zainab Zomlot, Jan Bronders, Oliver Schmitz and Okke Batelaan.</i> Flexible process-based modeling: the open-source WetSpa-Python model applied to an ungaged semi-arid region
15:00-15:20	<i>Allelign Zeru.</i> A dynamic system modeling approach with MODELICA for water resources demand and supply management.
15:20-15:40	<i>Seleshi Yalew, Ann van Griensven and Pieter van der Zaag.</i> The Use of Google Earth Engine for Land Cover Classification in the Upper Blue Nile Basin
	Session 6B - Catchment studies (Convener: Tammo Steenhuis)
14:00-14:20	<i>Alvin Rujweka, William Sekendo, Ann van Griensven.</i> Set up and evaluation of SWAT for Kikuletwa in Upper Pangani basin Tanzania
14:20-14:40	<i>Olufemi Abimbola, Jochen Wenninger and Raymond Venneker.</i> Assessment of Water Resources in Ungauged Catchments in Rwanda .
14:40-15:00	<i>Aklilu Teklesadik and others.</i> Inter-model comparison of water balance simulations and climate change projections for the Blue Nile basin .
15:00-15:20	<i>Solomon D. Seyoum.</i> Topographic Grid Generalization for Urban flood Modelling
15:20-15:40	<i>Tracy Baker, Yihun Dile, Asghar Hussain, Raghavan Srinivasan and Simon Langan.</i> Digital elevation model resolution considerations when using SWAT in East African watersheds
15:40-16:30	Coffee Break
	Session 7A - Food productivity & agricultural applications (convener: Jeremiah Kiptala)
16:30-16:50	<i>Hanne Van Gaelen, Patrick Willems, Jan Diels and Dirk Raes.</i> The AquaCrop-VHM model combination to simulate catchment hydrology in agricultural areas
16:50-17:10	<i>Mehari Hiben.</i> Estimation of Flood-based Farming in Tigray: Significance for Regional Food Security and Rural Livelihood Using Open Source software
17:10-17:30	<i>Getahun Wendmkun Adane, Charlotte de Fraiture and Abraham Mehari Haile.</i> Groundwater Modelling and Optimization of Irrigation Water Use Efficiency to Sustain Irrigation in Kobo Valley, Ethiopia.
17:10-17:30	<i>Belayneh Tesfaye, Tadesse Alemayehu, Ann van Griensven.</i> Using ET estimations derived from remote sensing data to improve hydrological models of the Blue Nile basin.
	Session 7B - Data and Tool developments for water management (convener: Elga Salvatore)
16:30-16:50	<i>Fenet Tadese, Dereje Hailu and Semu Moges.</i> VALIDATION OF GLOBAL PRECIPITATION DATA SETS TO RUNOFF GENERATION USING SWAT MODELING SYSTEM.
16:50-17:10	<i>Tadesse Alemayehu, Ann van Griensven and Willy Bauwens.</i> Potential of open source climate data for hydrological modeling in Africa.
17:10-17:30	<i>Fenet Tadese, Dereje Hailu and Semu Moges.</i> VALIDATION OF GLOBAL PRECIPITATION DATA SETS TO RUNOFF GENERATION USING SWAT MODELING SYSTEM.
17:30-17:50	<i>Debebe L. Yilak</i> Runoff mechanism assessment using SCS - CN method in the Upper Blue Nile Basin of Ethiopia: Anjeni Watershed
18:00	Closing



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Poster presentations	
1	<i>S.N Kalaimathy. and C. Visvanathan.</i> Investigation on Ceramic Membrane Based Filter Backwash Water Recycling
2	<i>Ayman A. Elshayeb.</i> The impact of bacteriophages in bacteria removal associated with Soba Stabilisation Station efficiency
3	<i>Ayman A. Elshayeb.</i> Influence of seasonality on Salmonella concentration and dynamics in Khartoum wastewater stabilization station
4	<i>Sisay Derso.</i> Ecological status of hot springs in Eastern Amhara Region: Macroinvertebrates diversity
5	<i>Elijah Wanda.</i> Hydrogeochemical modeling of emerging micro-pollutants from drinking water systems in South-Africa
6	<i>Nzouebet Letah.</i> Does Depth And Sanitation Type Affect The Quality Of Faecal Sludge In The Tropics? The Case of Yaoundé, Cameroon
7	<i>Samuel Orecho and Anna Msigwa.</i> Modeling river flooding, climatic variability and catchment land use change at Kwamnyonge catchment in Tanzania using Hydrologiska Byrans Vattenbalansavdelning (HBV) model.
8	<i>L. Yilak Yilak.</i> Runoff mechanism assessment using SCS-CN method in the Upper Blue Nile Basin of Ethiopia: Anjeni Watershed
9	<i>Maloba Joseck Joab.</i> Effects of increased land use changes on runoff and sediment yield in the upper river Nzoia catchment
10	<i>Mamaru A. Moges.</i> ESTABLISHING SEDIMENT CONCENTRATION RATING CURVES IN THE UPPER BLUE NILE BASIN
11	<i>Cheruiyot Cheruiyot.</i> The strategies used in coping with Climate Change and Variability in the Arid and Semi Arid Regions of Kenya

2015 Workshops programme

Workshop topics	
14-15 September	QSWAT by Chris George (developer of QSWAT interface) & Ann van Griensven (VUB/UNESCO-IHE)
15 September	AQUACROP by Dirk Raes (developer of AQUACROP/KULeuven) and Hanne Van Gaele (KULeuven)

Registration can be done through:

<http://www.eventzilla.net/web/event?eventid=2139092657>

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