





# 9th FRIEND-Water Global Conference 2023 | Institut Confucius | Université Cheikh Anta Diop, Dakar

TUESDAY, SEPTEMBER 26



8:00 AM → 9:00 AM	Registration desk & Welcome	1h
9:00 AM → 10:00 AM	Opening ceremony: Welcome address	Amphitheatre
10:00 AM → 11:00 AM	Opening ceremony: Keynote presentations	Amphitheatre
10:00 AM	<b>Keynote</b> Speaker: Prof. Cheikh Bécaye Gaye	30m
10:30 AM	<b>Keynote</b> Speaker: Prof. Maciej Zalewski	30m
11:00 AM → 11:30 AM	Coffee break	30m
11:30 AM → 1:00 PM	<b>ST1   Ecohydrology: Dual regulation</b> Conveners: Didier ORANGE (IRD), Ernest AMOUSSOU (Université Parakou), Maciej ZALEWSKI (European Regional Centre for Ecohydrology), Oula AMROUNI (National Institute of Marine Sciences and Technologies of Tunisia), Pascal BREIL (INRAE)	Amphitheatre
11:30 AM	<b>Quantifying Environmental Water Use</b> Speaker: Robert MILHOUS (Retired U.S. Geological Survey)	15m
11:45 AM	<b>Two ecohydrological solutions to reduce urban runoff: examples from Lyon (France) and Quérétero (Mexico)</b> Speaker: Pascal BREIL (INRAE)	15m
12:00 PM	<b>Monitoring Coastal Ecosystem Evolution for a Sustainable Blue food security</b> Speaker: Oula AMROUNI (National Institute of Marine Sciences and Technologies of Tunisia)	15m
12:15 PM	<b>Do the water stable isotopes (<math>\delta^{18}O</math> and <math>\delta^2H</math>) give insight into the hydrological impact of agroforestry systems? The case of <i>Faidherbia albida</i> parklands in the Senegalese Groundnut basin</b> Speaker: Djim M L DIONGUE (UCAD)	15m
12:30 PM	<b>The effect of soil moisture on the physiological parameters of millet and groundnut during a period of water deficit at the beginning of rainy season.</b> Speaker: Mame Balla NDIAYE (UCAD)	15m
12:45 PM	<b>The augmented biodiversity to improve the domestic waste water cleaning through Nature Based Solutions</b> Speaker: Didier ORANGE (IRD)	15m
11:30 AM → 1:00 PM	<b>ST2   Climate change &amp; Water resources resilience: Hazards data treatment &amp; mapping</b> Conveners: Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU, Telesphore BROU	Room 1
11:30 AM	<b>Characterization of extreme high water hydroclimatic events in the complex of lower mono-couffo valley</b> Speaker: Domiho Japhet KODJA (LACEEDE/EDP/UAC)	15m

- 11:45 AM** | **Spatio-temporal evolution of rainfall extremes in the city of dakar** 🕒 15m ✎

**Speaker:** Franck-Evrard KOFFI (UNIVERSITE FELIX HOUPHOUËT-BOIGNY)
- 12:00 PM** | **Flood risk zone mapping of the Bonoumin-palmeraie watershed using analytic hierarchy process (AHP) and sensitivity tests methods** 🕒 15m ✎

**Speaker:** Jean DANUMAH (Centre Universitaire de Recherche et d'Application en Télédétection (CURAT))
- 12:15 PM** | **Urban sprawl process in Dakar: impact on runoff and flooding** 🕒 15m ✎

**Speaker:** Laurent Pascal M. DIEME (Université Gaston Berger Saint-Louis)
- 12:30 PM** | **Rainfall risks and hydro-agricultural developments in the Aga-Foua-Djilas watershed.** 🕒 15m ✎

**Speaker:** Philippe Malick DIONE (Université Assane Seck de Ziguinchor)

**11:30 AM** → 1:00 PM

**ST5 | Large rivers management: Supporting shared water uses in large & transboundary basins** 📍 Room 2 ✎  
**Conveners:** Alioune KANE, Andrew OGILVIE (IRD), Ansoumana BODIAN (Université Gaston Berger Saint-Louis), Awa Niang FALL

- 11:30 AM** | **Transboundary basins: Governance and cooperation among African States** 🕒 15m ✎

**Speaker:** Adeyemi OLUSOLA (York University)
- 11:45 AM** | **Use of reanalysis data to estimate water requirements of major crops in the Senegal River Delta** 🕒 15m ✎

**Speaker:** Adja Salamata GASSAMA (Université Gaston Berger Saint-Louis)
- 12:00 PM** | **Vulnerability of surface water bodies and development of irrigated agriculture: assessment of the ecological quality of the Guiers lake (Senegal)** 🕒 15m ✎

**Speaker:** Hikimat SAADI (UCAD/EDEQUE)
- 12:15 PM** | **Exploring the "Water-Energy-Food-Ecosystems" nexus in the Senegal river basin: an approach combining participatory workshops and hydroeconomic modelling** 🕒 15m ✎

**Speaker:** Laura SEGUIN (BRGM)
- 12:30 PM** | **Assessing hydrological processes and water uses beyond official data in Africa: examples from the Senegal River Basin** 🕒 15m ✎

**Speaker:** Laurent BRUCKMANN (Université Laval)
- 12:45 PM** | **Availability of water resources in the Bango reserve under the anti-salt dam of Diama in the Senegal River delta** 🕒 15m ✎

**Speaker:** Madina BA (UCAD)

**1:00 PM** → 2:30 PM

**Lunch break** 🕒 1h 30m

**2:30 PM** → 4:00 PM


**ST1 | Ecohydrology: Dual regulation** 📍 Room 1 ✎  
**Conveners:** Didier ORANGE (IRD), Ernest AMOUSSOU (AcTNAO interdisciplinary team), Oula AMROUNI (National Institute of Marine Sciences and Technologies of Tunisia), Pascal BREIL (INRAE)


- 2:30 PM** | **Monitoring of shoreline changes using aerial drone photogrammetry in Mediterranean coast** 🕒 15m ✎


**Speaker:** Abderraouf HZAMI (National Institute of Marine Sciences and Technologies)
- 2:45 PM** | **Impacts of the spatial evolution of salinity conductivity and hydrogen potential (ph) in the fisheries of Lake Nokoue (southern Benin).** 🕒 15m ✎

**Speaker:** Florentin TOTIN (Laboratoire Pierre PAGNEY Climat Eau Écosystème et Développement - LACEEDE)
- 3:00 PM** | **Caracterizing soil hydraulic properties using best method in a semi-arid agrosysteme parc land (the peanut basin of senegal)** 🕒 15m ✎

**Speaker:** Waly FAYE (UCAD)


- 3:15 PM **Smartcleangarden concept to provide a value to domestic waste waters in saving waters in tropical cities** ⌚ 15m 

Speaker: Didier ORANGE (IRD)
- 3:30 PM **Quantifying Environmental Water Use** ⌚ 15m 


Speaker: Robert MILHOUS (Retired U.S. Geological Survey)
- 3:45 PM **Forest-Water Nexus: An Evapotranspiration assessment of the Kafue River Sub-Basin using remote sensing** ⌚ 15m 


Speaker: Muyaka KAMAMBA (University of Zambia)


2:30 PM → 4:00 PM


**ST2 | Climate change & Water resources resilience: WRR in basins and littoral environments** 📍 Amphitheatre 


Conveners: Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU (UCAD), Telesphore BROU


- 2:30 PM **Assessment of the hydrological resilience of the n'zi river basin in Côte d'Ivoire using the Budyko framework.** ⌚ 15m 

Speaker: Gneneyougou SORO (Université NANGUI ABROGOUA)
- 2:45 PM **Floods on the Ouémé River basin in Benin: A holistic approach of management** ⌚ 15m 

Speaker: Henri Sourou TOTIN VODOUNON (University of Parakou)
- 3:00 PM **Trend Analysis of Low Flows in North Algeria** ⌚ 15m 

Speaker: Hind MEDDI (Higher National School of Hydraulics)
- 3:15 PM **Updating of the intensity-duration-frequency curves (IDF) in the District of Abidjan (Côte d'Ivoire).** ⌚ 15m 

Speaker: Kouakou Christian Junior YAO (Laboratoire de Science de la Matière de l'Environnement et de l'Energie Solaire (LASMES) - Université Félix Houphouët Boigny)
- 3:30 PM **Impacts of climate variability on the resources of the Gambia River watershed** ⌚ 15m 


Speaker: Mamadou NDIONE (UCAD)
- 3:45 PM **Projected water accounts under climate change in the transboundary Volta River Basin** ⌚ 15m 


Speaker: Moctar DEMBELE (University of Oxford)


2:30 PM → 4:00 PM


**ST5 | Large rivers management: Supporting shared water uses in large & transboundary basins** 📍 Room 2 


Conveners: Alioune KANE, Andrew OGILVIE (IRD), Ansoumana BODIAN (Université Gaston Berger Saint-Louis), Awa Niang FALL


- 2:30 PM **Opportunities for the Agrarian Dynamics in the West African Floodplains** ⌚ 15m 

Speaker: Aymar BOSSA (University of Abomey-Calavi)
- 2:45 PM **Impact of infrastructures on inland water presence within the senegal river basin using gis techniques** ⌚ 15m 

Speaker: Mbayang THIAM (UCAD)
- 3:00 PM **Women in transboundary water conflict resolution in the Nile basin: a comparative study between mingingo islands in Kenya and Kagera river in Rwanda.** ⌚ 15m 

Speaker: Zipporah MUREITHI (Egerton University)
- 3:15 PM **The impact of climate variability on water resources in the lac de Guiers area** ⌚ 15m 

Speaker: Matar SYLLA (UCAD)
- 3:30 PM **Pesticides residues accumulation in freshwater and fish in the Guiers Lake basin: Risks for Senegal's strategic water reservoir** ⌚ 15m 

Speaker: Alousseynou BAH (UCAD)
- 3:45 PM **Improvement of the classical water balance equation: case study of the tabular middle atlas** ⌚ 15m 

Speaker: Yassine HAMMOUD (Faculty of Sciences of Rabat - Mohammed V University)

4:00 PM → 4:30 PM

Coffee break

🕒 30m

4:30 PM → 6:00 PM

**ST1 | Ecohydrology: Water related flux/ecosystem services estimation**📍 Room 1 

**Conveners:** Didier ORANGE (IRD), Ernest AMOUSSOU (AcTNAO interdisciplinary team), Oula AMROUNI (National Institute of Marine Sciences and Technologies of Tunisia), Pascal BREIL (INRAE)

4:30 PM

**Study of the continental waters of the Republic of Djibouti: physico-chemical characteristics and biological (Biodiversity).**🕒 15m **Speaker:** Ibrahim SOULEIMAN ABDALLAH (University of Djibouti)

4:45 PM

**The impacts of competing freshwater resource uses on quality : case of the transboundary Falémé River (Sénégal)**🕒 15m **Speaker:** Ange Bouramanding DIEDHIOU (IRD)

5:00 PM

**Immobilization of Phragmites australis peroxidase onto a porous silicon electrode sio 2 /Al to enhance its activity and stability to degrade an azo dye: Amaranth.**🕒 15m **Speaker:** Dalila HADDAJI (Centre of water research and technologies)

4:30 PM → 6:00 PM

**ST2 | Climate change & Water resources resilience: WRR in basins and littoral environments**📍 Amphitheatre 

**Conveners:** Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU, Telesphore BROU

4:30 PM

**The resilience of the Saloum islands (Senegal) in the face of the challenges of access to drinking water: what contribution of the Notto-Diosmone-Palmarin (NDP) transfer system in the governance of water resources in an island environment?**🕒 15m **Speaker:** Mouhamadou Mansour NGUIRANE (UCAD/EDEQUE)

4:45 PM

**Influence of climate change on the water resources in the Central Andes of Argentina**🕒 15m **Speaker:** Rodolfo CHRISTIANSEN (Ruhr-Universität Bochum)

5:00 PM

**The role of fishponds in hydrologic regime**🕒 15m **Speaker:** Vaclav DAVID (Czech Technical University in Prague)

5:15 PM

**Adapting Multireservoir Operation to Long-term Climate Variability Under Climate Change**🕒 15m **Speaker:** Vahid ESPANMANESH (Laval University)

5:30 PM

**Wavelet analysis of spatio-temporal variability in surface soil moisture under different landuses in southwestern Nigeria**🕒 10m **Speaker:** Adedayo ADEWOLE (Obafemi Awolowo University - Ile-Ife -Osun State Nigeria)

5:40 PM

**Portrait of the Koular watershed (Central-Western Senegal) to facilitate effective development to curb saline intrusion.**🕒 10m **Speaker:** Cheikh Tidiane WADE (UCAD)

5:50 PM

**The contribution of the spatial distribution of rainfall for the understanding of the hydrological functioning of the Upper Oum Er-Rbia basin (upstream Machraa Edahk) - Morocco**🕒 10m **Speaker:** Nadia LAHLOU (University Mohamed V - Morocco)

4:30 PM → 6:00 PM

**ST5 | Large rivers management: Sediment presence & transport in large basins**📍 Room 2 

**Conveners:** Alioune KANE, Andrew OGILVIE (IRD), Ansoumana BODIAN (Université Gaston Berger Saint-Louis), Awa Niang FALL

4:30 PM

**The International Sediment Initiative (ISI) and its Case Studies on Sediment Management in River Basins**🕒 15m **Speaker:** Cheng LIU (International Research and Training Center on Erosion and Sedimentation)

4:45 PM

**Dynamics of flow in a highly anthropized watershed: application to the coastal basin of the somone for water resource management and planning**🕒 15m **Speaker:** Mamadou KANE (UCAD/EDEQUE)

5:00 PM

**Evolution of rainfall maximum discharge and solid transport in northern Algeria**🕒 15m **Speaker:** Faiza HALLOUZ (Djilali BOUNAAMA University of Khemis Miliana)

5:15 PM

**First assessment of dissolved and particulate matter biogeochemistry of the Kasai River**🕒 15m **Speaker:** José NLANDU WABAKANGHANZI (DEPARTMENT OF SOIL PHYSIC AND HYDROLOGY / CONGO ATOMIC ENERGY COMMISSION)

5:30 PM

**Risks of overflow and salinization of the marigot of Mbao (Senegal) and their impacts on socio-economic activities.**🕒 15m **Speaker:** Saidou NDAO (Université de Thiès)

5:45 PM

**Evaluating the Impact of Climate Variability and Anthropogenic Activities on Streamflow Condition in Large River Basin using Budyko-based Functions**🕒 15m **Speaker:** Sabab Ali SHAH (Aror University of Art Architecture Design and Heritage Sindh)



# 9th FRIEND-Water Global Conference 2023

WEDNESDAY, SEPTEMBER 27



8:30 AM → 9:00 AM Registration desk & Welcome 30m Centre Confucius

9:00 AM → 10:30 AM ST1 | Ecohydrology: Water quality relation to land use Room 2

Conveners: Didier ORANGE (IRD), Ernest AMOUSSOU (AcTNAO interdisciplinary team), Oula AMROUNI (National Institute of Marine Sciences and Technologies of Tunisia), Pascal BREIL (INRAE)

9:00 AM Groundwater quality and risk assessment of heavy metal pollution using water quality index as a communication tool: Evidence from Ejigbo (Lagos-Nigeria) 15m Speaker: Isaiah AKOTEYON (Lagos State University)

9:15 AM The characterization of groundwater and assessment of water quality of the Continental Terminal aquifer in Casamance (Senegal): hydrodynamic - multivariate statistic and hydrochemical approach 15m Speaker: Mouhamet Moustapha DIAW (UCAD/EDEQUE/ENIS)

9:30 AM Spatiotemporal variability of water quality parameters in the Niger River 15m Speaker: Moussa BOUBACAR MOUSSA (Université Toulouse 3 Paul Sabatier)

9:45 AM Linking fish assemblages to hydro-morphology and physico-chemical parameters in the Pendjari River (Benin - West Africa) 15m Speaker: Simon AHOUANSON MONTCHO (School of Aquaculture - National University of Agriculture (UNA))

10:00 AM Application of principal component analysis (PCA) for the physicochemical and bacteriological characterization of a tropical hydro system waters: Case of ndjili river watershed (DRC). 15m Speaker: Zouera SANI BOUBACAR GOUBE GAOH (Centre de Recherche en Ressources en eaux du Bassin du Congo - Ecole Regionale de l'Eau - Université de Kinshasa)

9:00 AM → 10:30 AM ST2 | Climate change & Water resources resilience: Hydrological modelling Room 1

Conveners: Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU, Telesphore BROU

9:00 AM Runoff Sensitivity to Climate Variability and Land Cover Change reveals a second Sahel Hydrological Paradox 15m Speaker: Elias NKIAKA (University of Sheffield)

9:15 AM Mise en place de modèles de prédétermination des débits dans les bassins non jaugés : cas du bassin versant transfrontalier de la Comoé (Côte d'Ivoire - Mali - Burkina - Ghana) 15m Speaker: Koffi Eugène KOUAKOU (INP-HB YAMOOUSSOUKRO)

9:30 AM Past and future hydrological extremes analysis over the Senegal river basin 15m Speaker: Mamadou Lamine MBAYE (Université Assane SECK de Ziguinchor)

9:45 AM Application du modèle swat pour la modélisation de l'écoulement dans un bassin versant peu jauge en zone soudano-sahélienne (burkina faso) 15m Speaker: Niang DIAL (Institut International d'Ingénierie de l'Eau de l'Environnement (2IE))

10:00 AM Analysis of the start and end dates of the rainy season in the Kayanga/Geba and Koliba/Corubal river basins (Guinea - Senegal - Guinea-Bissau) 15m Speaker: Saly SAMBOU (UCAD)

10:15 AM Numerical modelling of flooding in sub-Saharan African cities: Insights from Ouagadougou Area - Burkina Faso 15m Speaker: Tazen FOWE (International Institute for Water and Environmental Engineering)

9:00 AM → 10:30 AM

**ST3 | Bridging the data-knowledge gaps in hydrology: Development of climate & hydro services**

📍 Amphitheatre



Conveners: Abdoulaye FATY (UCAD), Jean-Emmanuel PATUREL (IRD), Jérôme LE COZ (INRAE), Stephan DIETRICH (ICWRGC)

9:00 AM

**HAMR: drought monitoring system**

🕒 15m



Speaker: Adam VIZINA (T.G.Masaryk Water Research Institution)

9:15 AM

**Valorization of meteorological archives in Côte d'Ivoire**

🕒 15m



Speaker: Jean-Emmanuel PATUREL (IRD)

9:30 AM

**Hydrosos: Implementing a global Hydrological Status and Outlook System from the bottom up**

🕒 15m



Speaker: Lucy BARKER (UK Centre for Ecology & Hydrology (UKCEH))

9:45 AM

**Innovative approaches in water resources status and forecasting – a global perspective**

🕒 15m



Speaker: Nathan RICKARDS (UK Centre for Ecology & Hydrology)

10:00 AM

**Facilitating access to global runoff data: API and tools for GRDC data sets**

🕒 15m



Speaker: Thomas RECKNAGEL (Global Runoff Data Centre (GRDC))

10:15 AM

**A FRIEND-Water perspective on Bridging Data Knowledge Gaps in Hydrology**

🕒 5m



Speaker: Stephan DIETRICH (ICWRGC)

10:20 AM

**The Global Runoff Database – A unique archive for river discharge data**

🕒 5m



Speaker: Thomas RECKNAGEL (Global Runoff Data Centre (GRDC))

10:30 AM → 11:00 AM

Coffee break

🕒 30m

11:00 AM → 1:00 PM

**Joint ST1/ST2/ST3 session: Understanding and protecting Groundwater resources**

📍 Room 1



Conveners: Aristide DOUAGUI (Université Nangui Abrogoua), Serigne FAYE (UCAD)

11:00 AM

**Approach of geophysical prospection (1D) to the knowledge of groundwater resources of the Sissili sub-catchment Burkina-Faso**

🕒 15m



Speaker: Moussa D. FAYE (Institut 2IE)

11:15 AM

**Assessment of the risk of pollution of an area suitable for the establishment of a water point: case of the department of Yamoussoukro (Central Côte d'Ivoire)**

🕒 15m



Speaker: Jules MANGOUA (Université Jean Lorougnon Guédé Daloa)

11:30 AM

**The marine intrusion in the Maghreb countries bordering the Mediterranean Sea.**

🕒 15m



Speaker: Larbi DJABRI (Laboratoire Ressource en Eau & Développement Durable. Université Badji Mokhtar Annaba)

11:45 AM

**Groundwater salinity in Senegal : geomorphological factors and spatialisation**

🕒 15m



Speaker: Luc DESCROIX (IRD)

12:00 PM

**Overexploitation of the Maastrichtian aquifer in Senegal**

🕒 15m



Speaker: Maria FAYE (UCAD)

12:15 PM

**Functional and statistical study for 3 cycles of the losses with high temporal resolution (1 hour) measured in the bed of the Gardon (France) downstream from Ners (Gard)**

🕒 15m



Speaker: Saliou KAMARA (Avignon université/UMR ESPACE/CNRS)

12:30 PM **Rising groundwater levels and pollution in the thiaroye aquifer of Dakar Senegal: water management in a rapidly growing urban environment** ⌚ 15m ✎

Speaker: Seynabou Cisse FAYE (Geology Department Faculty of Sciences & Techniques - UCAD)

12:45 PM **Assessment of climate extremes on groundwater in Africa and projection of their medium and long term impacts** ⌚ 15m ✎

Speaker: Komi Mawulom Claude AFAMONDI (Laboratory of Geosciences Water and Environment of the Faculty of Sciences at the Mohammed V University in Rabat)

**11:00 AM** → 12:00 PM **ST3 | Bridging the data-knowledge gaps in hydrology: Open science & open edu resources in hydrology** 📍 Room 2 ✎

Conveners: Abdoulaye FATY (UCAD), Jean-Emmanuel PATUREL (IRD), Jérôme LE COZ (INRAE), Stephan DIETRICH (ICWRGC)

11:00 AM **Quantifying the uncertainty of ADCP discharge measurements through inter-comparisons** ⌚ 15m ✎

Speaker: Jérôme LE COZ (INRAE)

11:15 AM **Open and Free Datasets for Hydrology Research: Insights Challenges and Opportunities** ⌚ 15m ✎

Speaker: Michelle NEWCOMER (Lawrence Berkeley National Laboratory)

11:30 AM **Dynamique territoriale autour de l'activité minière artisanale et des ressources en eau en Afrique de l'Ouest : une réflexion transdisciplinaire pour des solutions durables** ⌚ 15m ✎

Speaker: Ndeye Maramé NGOM (Université Cheikh Anta Diop de Dakar)

11:45 AM **Socio-economic assessment of access and management of drinking water in island areas: case of the island of Niodior (Fatick-Senegal)** ⌚ 15m ✎

Speaker: Oumou NIANG (Institut des Sciences de l'Environnement/UCAD/DAKAR/SENEGAL)

**11:00 AM** → 1:00 PM **ST5 | Large rivers management: Exploring hydroclimatic variability in large basins** 📍 Amphitheatre ✎

Conveners: Alioune KANE (UCAD), Andrew OGILVIE (IRD), Ansoumana BODIAN (Université Gaston Berger Saint-Louis), Awa Niang FALL (UCAD)

11:00 AM **Variability of the Senegal River floodplain under climate change scenarios** ⌚ 15m ✎

Speaker: Andrew OGILVIE (IRD)

11:15 AM **Sensitivity of the GR4J model to different estimating methods of potential evapotranspiration** ⌚ 15m ✎

Speaker: Ansoumana BODIAN (Université Gaston Berger Saint-Louis)

11:30 AM **Satellite-based Rainfall Estimates to Simulate Daily Streamflow Using a Hydrological Model over Gambia Watershed** ⌚ 15m ✎

Speaker: Bakary FATY (Direction de la Gestion et de la Planification des Ressources en Eau)

11:45 AM **Open earth observation data for water accounting in large river basins: case of the Volta River basin in West Africa** ⌚ 15m ✎

Speaker: Moctar DEMBELE (International Water Management Institute (IWMI))

12:00 PM **The influence of climate change on the spatial distribution of precipitation in the basin of the Transboundary Zeravshan River Basin in Central Asia and the formation of the river Runoff** ⌚ 15m ✎

Speaker: Mouhamed DANGOURA (UCAD)

12:15 PM **Projected changes in the rainfall annual cycle over the Senegal River Basin using CMIP5 bias-corrected simulations** ⌚ 15m ✎

Speaker: Moussa DIAKHATE (Université Amadou Mahtar MBOW)

12:30 PM **Effect of the SWATPLUS input parameters on the modeling of the Senegal River flow at the Bafing - Bakoye - Faleme** ⌚ 15m ✎

Speaker: Mousse Landing SANE (UCAD)

12:45 PM **First approaches for the development of the SWAT model in the Senegal River Basin** ⌚ 15m ✎

Speaker: Abou DIA (UCAD)



12:00 PM → 1:00 PM

**ST3 | Bridging the data-knowledge gaps in hydrology: Scientific data mgmt & data exchange in hydrology**

Room 2

**Conveners:** Abdoulaye FATY (UCAD), Jean-Emmanuel PATUREL (IRD), Jérôme LE COZ (INRAE), Stephan DIETRICH (ICWRGC)

12:00 PM

**ROBIN - A Reference Observatory of Basins for international hydrological climate change detection**

15m

**Speaker:** Jamie HANNAFORD (UK Centre for Ecology & Hydrology)

12:15 PM

**New time series of gridded climatic variables for Czechia and their potential for nationwide hydrology**

15m

**Speaker:** Ondrej LEDVINKA (Czech Hydrometeorological Institute)

12:30 PM

**The Global Terrestrial Network - Hydrology (GTN-H): a unique source of global hydrological observations**

15m

**Speaker:** Stephan DIETRICH (ICWRGC)

12:45 PM

**The International Soil Moisture Network (ISMN): A permanent service for delivering long-term in situ soil moisture data**

15m

**Speaker:** Wolfgang KORRES (Federal Institute of Hydrology)

1:00 PM → 2:30 PM

Lunch break

1h 30m

2:30 PM → 4:00 PM

**Joint ST1/ST2/ST5 session: Advancing Interdisciplinarity & Science for water solutions**

Room 2

**Conveners:** Gil MAHE (IRD), Madiodio NIASSE, Rodric Merime NONKI (LEMAP - University of Yaoundé 1), Valerie BORRELL ESTUPINA (Université de Montpellier)

2:30 PM

**Urban flooding in West Africa: holistic approaches to urban management in West Africa - the case of the propagation of rainfall floods in Cotonou**

15m

**Speaker:** Ernest AMOUSSOU (AcTNAO interdisciplinary team)

2:45 PM

**Impacts of climate change on river sustainability in a semi-arid agricultural region of South Africa**

15m

**Speaker:** Jane TANNER (Rhodes University)

3:00 PM

**Identifying non water-related leverages to improve water security at the local scale**

15m

**Speaker:** Olivier BARRETEAU (INRAE)

3:15 PM

**Using the water footprint concept to understand the link between water scarcity and violent conflicts in the Central-West Africa sub-region.**

15m

**Speaker:** Elias NKIACA (University of Sheffield)

3:30 PM

**Charm-EU pilot capstone on climate resilience of farming communities**

15m

**Speaker:** Dimitri SORO (Université Félix Houphouët-Boigny)

3:45 PM

**A teaching unit designed in innovative and active pedagogy to understand and meet the climate resilience transdisciplinary challenges that are facing our territories (south and north) labeled by the UNESCO ICIREWARD center**

15m

**Speaker:** Valerie BORRELL ESTUPINA (Université de Montpellier)

2:30 PM → 4:00 PM

**ST2 | Climate change & Water resources resilience: Hydrometeorological variability & indices**

Room 1

**Conveners:** Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU, Telesphore BROU

2:30 PM

**Investigating past and future changes of hydroclimatic extremes in the Ouémé headwater catchment in West Africa**

15m

**Speaker:** Aymar BOSSA (University of Abomey-Calavi)

2:45 PM

**Study of climate variability in the Mountain District of Côte d'Ivoire (1961 to 2020).**

15m

**Speaker:** Coulibaly LEREYAHA (Université de MAN)

3:00 PM	<b>Variabilite interannuelle de la pluviometrie de la zone forestiere aux savanes dans le sud-ouest centrafricain</b> Speaker: Jean Marie DJEBATA (École Normale Supérieure (ENS) de Bangui)	15m	
3:15 PM	<b>Large-Scale Climatic Drivers of Long-term variability in the Frequency of Flood Events across Sub-Saharan Africa</b> Speaker: Job EKOLU (Coventry University)	15m	
3:30 PM	<b>Water Resources Resilience of the « false » West African Water Tower</b> Speaker: Luc DESCROIX (IRD)	15m	
3:45 PM	<b>Dry spells in the Ichkeul lake basin (Tunisia): diagnosis of droughts using daily data</b> Speaker: Majid MATHLOUTHI (LRSTE)	15m	

**2:30 PM → 4:00 PM** **ST4 | Spatial hydrology: Innovative observation technologies** 📍 Amphitheatre

Conveners: Fernand KOUAME (UVCI), Raphael TSHIMANGA (CRREBaC), Santiago YEPEZ (University of Concepción)


2:30 PM	<b>Apport des outils spatiaux dans la compréhension de paramètres hydrologiques dans le bassin versant Djiguimar</b> Speaker: Abdoulaye FATY (UCAD)	15m	
2:45 PM	<b>Application of remote sensing to water quality parameters over lakes using time series from Sentinel-2 and Landsat-8/9. Study case: laguna grande - biobio - chile</b> Speaker: Santiago YEPEZ (University of Concepción)	15m	
3:00 PM	<b>Satellite-based monthly surface water storage database for the Congo basin from 1992-2015</b> Speaker: Benjamin KITAMBO (Laboratoire d'études en géophysique et océanographie spatiales (LEGOS))	15m	
3:15 PM	<b>Characterization of flooding in the Mono basin with the HEC RAS model</b> Speaker: Ernest AMOUSSOU (Université de Parakou)	15m	
3:30 PM	<b>Flood risk management and local development in the Dyonkoto - Boubon strip in Niger: remote sensing approach</b> Speaker: Hadiza KIARI FOUYOU (Université de Diffa - Niger)	15m	
3:45 PM	<b>Modeling freshwater discharge of poorly monitored African rivers using remote sensing-based land surface model</b> Speaker: Komlavi AKPOTI (International Water management Institute)	15m	

**4:00 PM → 4:30 PM** **Coffee break** 🕒 30m

**4:30 PM → 6:00 PM** **Joint ST1/ST2/ST5 session: Advancing Interdisciplinarity & Science for water solutions** 📍 Room 2

Conveners: Gil MAHE (IRD), Madiodio NIASSE, Rodric Merime NONKI (LEMAP - University of Yaoundé 1), Valerie BORRELL ESTUPINA (Université de Montpellier)

4:30 PM	<b>Water balance of ponds and their place in the agropastoral society of the Patar commune (Senegal)</b> Speaker: Fatou DIOUF (UCAD)	15m	
4:45 PM	<b>Transdisciplinarity - a need for the education of people on the Climate Change: the example of GFS in Senegal</b> Speaker: Didier ORANGE (IRD)	15m	
5:00 PM	<b>An adaptation of a scientific animation tool: the water mural</b> Speaker: Clémence DECROOCCQ (Centre international UNESCO ICIREWARD)	15m	
5:15 PM	<b>Delegation of public drinking water service management - an alternative to the community management model for improving access to water in rural Senegal.</b> Speaker: Samba BA (UCAD/EDEQUE)	15m	
5:30 PM	<b>Integrated stormwater management in a context of major development of a new city: case of the urban pole of diamiadio (dakar/senegal)</b> Speaker: Bandiougou NDIAYE (UCAD)	10m	

5:40 PM **Impacts of socio-economic activities on the quality of water resources in the commune of darou khoudoss.** ⌚ 10m 

Speaker: Vieux Malang DIATTA (UCAD)

5:50 PM **Agriculture urbaine genre et résilience climatique à Korhogo (nord de la Côte d'Ivoire)** ⌚ 10m 

Speaker: Yéboué Stéphane Koissy KOFFI (UNIVERSITE PELEFORO GON COULIBALY DE KORHOGO)

**4:30 PM → 6:00 PM** **ST2 | Climate change & Water resources resilience: Hydrometeorological variability & indices** 📍 Room 1 

Conveners: Alain DEZETTER, Amadou Thierno GAYE, Aminata NDIAYE, Bastien DIEPPOIS, Luc DESCROIX (IRD), Mohammed MEDDI (Higher National School of Hydraulics), Soussou SAMBOU, Telesphore BROU

4:30 PM **Effects of climate change on water requirements of orange trees in the Mitidja plain in Algeria** ⌚ 15m 

Speaker: Mohammed MEDDI (Higher National School of Hydraulics)

4:45 PM **Quantifying and partitioning the uncertainties of climate change impacts on hydrology and hydropower potential under 1.50C and 2.00C Global Warming Levels in the Headwaters of the Benue River Basin - Cameroon** ⌚ 15m 

Speaker: Rodric Merime NONKI (Laboratory for Environmental Modeling and Atmospheric Physics (LEMAP) - Department of Physics - Faculty of Sciences - University of Yaoundé 1)

5:00 PM **Analyse spectrale des précipitations mensuelles dans les régions situées au Centre du Sénégal.** ⌚ 15m 

Speaker: Ibraima TOURE (UCAD)

5:15 PM **Hydrological modelling with the SWAT tool of the Sandougou watershed in a context of climate change** ⌚ 15m 

Speaker: Ahmadou Bamba DIENG (UCAD)

5:30 PM **Paradox of water security and governance in the mountain range of fouta djallon** ⌚ 15m 

Speaker: Coura KANE (Université Alioune Diop de Bambey)

**4:30 PM → 6:00 PM** **ST4 | Spatial hydrology: Innovative observation technologies** 📍 Amphitheatre 


Conveners: Fernand KOUAME (UVCI), Raphael TSHIMANGA (CRREBaC), Santiago YEPEZ (University of Concepción)

4:30 PM **Harnessing spatial patterns of satellite data for multivariate hydrological model calibration** ⌚ 15m 

Speaker: Moctar DEMBELE (University of Oxford)

4:45 PM **Contribution of remote sensing to flood hazard mapping in the Riviera-Bonoumin watershed in the District of Abidjan (Ivory Coast)** ⌚ 15m 

Speaker: Bi Vami Hermann N'GUESSAN (Centre Universitaire de Recherche et d'Application en Télédétection (CURAT) - Université Félix Houphouët-Boigny)

5:00 PM **Evaluation of global gridded rainfall products in the main hydrosystems of Senegal: Casamance - Gambia - Senegal** ⌚ 15m 

Speaker: Omar GOUDIABY (Université Gaston Berger Saint-Louis)

5:15 PM **Analysis of the performance of satellite products for estimating evapotranspiration in the Senegal River Delta** ⌚ 15m 

Speaker: Papa Malick NDIAYE (Université Gaston Berger Saint-Louis)

5:30 PM **Groundwater Potential Zone mapping using Geographical informationsystem by Fuzzy- Analytic Hierarchy Process in humid area: case study ( Ghar El Melh (North Eastern of Tunisia))** ⌚ 15m 

Speaker: Amal KOUAIED (Université Tunis El Manar ( faculté des sciences de Tunis El Manar))

5:45 PM **Groundwater Recharge Zone Mapping Using GIS-based Multi-Criteria Evaluation and Analytical Hierarchy Process: A Case Study of Trarza Aquifer (Mauritania)** ⌚ 15m 

Speaker: Aguibou BA (UCAD)



	26 September 2023			27 September 2023		
	UCAD Confucius Amphitheatre	UCAD Confucius Room 1	UCAD Confucius Room 2	UCAD Confucius Amphitheatre	UCAD Confucius Room 1	UCAD Confucius Room 2
08:00	<i>Registration desk &amp; Welcome</i>					
08:30	<i>Registration desk &amp; Welcome</i>					
09:00	<i>Opening ceremony</i>			<b>ST3   Bridging the data-knowledge gaps in hydrology</b> Development of climate & hydro services	<b>ST2   Climate change &amp; WRR</b> Hydrological modelling	<b>ST1   Ecohydrology</b> Water quality relation to land use
09:30	<i>Keynote speakers</i>					
10:00				<i>Coffee break</i>		
10:30	<i>Coffee break</i>					
11:00				<b>ST5   Large rivers management</b> Exploring hydroclim variability in large basins	<b>Joint ST1/ST2/ST3 session</b> Understanding & protecting GW resources	<b>ST3   Bridging the data-knowledge gaps in hydrology</b> Open science & open edu resources in hydrology <b>ST1   Bridging the data-knowledge gaps in hydrology</b> Scientific data mgmt & data exchange in hydrology
11:30	<b>ST1   Ecohydrology</b> Dual regulation	<b>ST2   Climate change &amp; WRR</b> Hazards data treatment and mapping	<b>ST5 - Large rivers management</b> Supporting shared water uses in large & transboundary basins			
12:00				<i>Lunch</i>		
12:30	<i>Lunch</i>					
13:00	<i>Lunch</i>					
13:30	<i>Lunch</i>					
14:00	<i>Lunch</i>					
14:30	<b>ST2   Climate change &amp; WRR</b> WRR in basins and littoral environments	<b>ST1   Ecohydrology</b> Dual regulation	<b>ST5   Large rivers management</b> Supporting shared water uses in large & transboundary basins	<b>ST4   Spatial hydrology</b> Innovative observation technologies	<b>ST2   Climate change &amp; WRR</b> Hydromet variability & indices	<b>Joint ST1/ST2/ST5 Session</b> Advancing ID & science for water solutions
15:00				<i>Coffee break</i>		
15:30	<i>Coffee break</i>					
16:00	<i>Coffee break</i>					
16:30	<b>ST2   Climate change &amp; WRR</b> WRR in basins and littoral environments	<b>ST1   Ecohydrology</b> Water related flux/ecosystem services estimation	<b>ST5   Large rivers management</b> Sediment presence & transport in large basins	<b>ST4   Spatial hydrology</b> Innovative observation technologies	<b>ST2   Climate change &amp; WRR</b> Hydromet variability & indices	<b>Joint ST1/ST2/ST5 Session</b> Advancing ID & science for water solutions
17:00				<i>Coffee break</i>		
17:30				<i>Coffee break</i>		
18:00						
18:30						