



Institut Montpellierain
de l'Eau
et de l'Environnement



FLOW REGIME FROM INTERNATIONAL EXPERIMENTAL AND NETWORK DATA

FRIEND-Water2014: 7th Global FRIEND-Water Conference

**Montpellier, France
07-10 October 2014**

**Hydrology in a Changing World:
Environmental and Human Dimensions**

Fourth Circular

Organized by:

UNESCO's International Hydrological Programme (IHP)
Institut Montpellierain de l'Eau et de l'Environnement (IM2E)
International Association of Hydrological Sciences (IAHS-AISH)
IAHS-AISH French Committee
German IHP/HWRP Hydrological Committee
Institut de Recherche pour le Développement (IRD)
Hydrosciences Montpellier (HSM)

Background

What is FRIEND-Water?

FRIEND-Water (Flow Regime from International Experimental and Network Data) is an international collaborative network of experts, which started 25 years ago, and that aims to generate new understanding about regional hydrology and multi-scale water cycle processes. FRIEND-Water is investigating long-term variations and changes in hydrological variables to better understand the climate, river basin and human controls on the spatial and temporal distribution of water. The science and training supported by the FRIEND-Water programme are critical for: water resources management, socio-economic development, safeguard the environment, and assessing the impact of global change, including climate change and human impact. As a cross-cutting theme of UNESCO's, International Hydrology Program (IHP), FRIEND-Water contributes to research on: regional water resources, droughts, global change and the water cycle, and water education and capacity building. The FRIEND-Water programme complements and interacts with many national projects and international initiatives.

Scientific objectives

People around the world face a non-stationary environment due to global change (e.g. climate change, land use change, urbanization). Impacts of hydrological processes change. More extreme events (drought, floods) are reported in many places around the world. Deterioration of wet terrestrial and aquatic ecosystems is hard to reverse under the increased pressure on land. Many reservoirs are filling up with sediment quicker than planned. This urges society to critically evaluate current water management practices and to prepare for implementation of change in the management of the water resources at different time horizons.

Hydrological science generates vast bodies of new understanding about changes but faces challenges to share this knowledge with operational water management, stakeholders and policy-makers. On the other hand the latter groups have difficulties to raise and highlight their demands.

The FRIEND-Water2014 Conference aims at sharing knowledge about change in hydrological processes (e.g. regimes, hydro-extremes), their impacts (e.g. ecological flows, erosion-sedimentation), and how this knowledge can be streamlined to let water management and policy to adapt to it.

Conference topics

1. Hydrological databases: how to cope with future questions
2. Trends in hydrological regimes and extremes
3. Changes in ecological flows and coastal eco-hydrology
4. Erosion and sediment transport processes and trends
5. Regional observational-hydrological modelling frameworks
6. Water resources and prospective scenarios

The Venue of the Conference

The venue of the conference will be at the Mare Nostrum - Montpellier Agglomeration Aquarium, Allee Ulysse - Odysseum 34000 Montpellier, France. Final stop of the Tramway line 1.

FRIEND Publications

The conference will produce the following documents:

- Hydrology in a Changing World: Environmental and Human Dimensions, IAHS Red Book No 363 (IAHS Red Books papers are indexed by ISI and SCOPUS).
- A web based report summarizing the FRIEND-Water programme since 2010 per Regional FRIEND-Water Group.
- Web based poster proceedings.

The web-based reports will become available prior to the conference at:

<http://www.unesco.org/new/en/natural-sciences/environment/water/> under "HIGHLIGHTS"

Registration and Payment

The conference will be held from October 7th to 10th. Registration will be open on Monday 6th in the afternoon from 15:00 to 18:00.

The FRIEND Conference web site is now open for registration at: <http://www.im2e.org/>.

PLEASE NOTE THAT YOU FIRST HAVE TO PRE-REGISTER ON THE WEBSITE AND WAIT FOR THE LOCAL ORGANIZING COMMITTEE TO CONFIRM YOUR PRE-REGISTRATION BEFORE BEING ABLE TO FINALIZE YOUR REGISTRATION THROUGH THE WEBSITE

Registration fees

The registration fees include:

- Admission to all congress sessions
- All congress materials
- IAHS Red Book
- Daily coffee/tea breaks
- Gala dinner on October 8th
- Lunches on October 7th, 8th and 10th
- Two activities offered (in the limit of available places):
 - ✓ guided tour of the Aquarium on October 9th morning and / or afternoon
 - ✓ an animation / wine tasting before Gala dinner

The Red Book is included in the registration for participants paying full fees.

Registration details*	Until 15 May	After 15 May
Participant	340 €	400 €
Student (provide student card) and IM2E member	290 €	340 €
Supplements for Accompanying person*		
Gala dinner	40 €	40 €
Aquarium guided tour on October 9th morning and / or afternoon	15 €	15 €
Animation / wine tasting before Gala dinner	10 €	10 €

*All prices quoted are in Euros (€), including 20% VAT.

Cancellation of registration

No refunding can be done but, if you cannot attend, your registration can be used by someone else from your organization. Please inform as soon as possible the Congress Organization.

Payment

Your registration will only be accepted when full payment has been received. If you are unable to pay with a credit card (Visa or Eurocard/Mastercard) please settle your balance by bank transfer made out to CENTRE I.R.D. DE MONTPELLIER M. L'AGENT COMPTABLE SECONDAIRE in Euros.

Account holder: CENTRE I.R.D. DE MONTPELLIER M. L'AGENT COMPTABLE SECONDAIRE

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Please make sure to mention your name on your money transfer. The Congress secretariat will not be responsible for identifying funds transferred directly into the account when the name of the participant or invoice number is not mentioned, nor will the Congress secretariat accept charges of bank fees associated with the transfer.

Presentations

Oral Presentations

The speakers will have 15 min to present their paper, followed by 5 min of questions. The chairs of the sessions will watch and make respect scrupulously the granted time. The presentations will be made in English or in French; no simultaneous translation will be available.

Annex 1 provides a detailed program including titles of oral presentations.

Posters

Posters will be shown in a dedicated room on Tuesday 7 and Wednesday 8 October.

Annex 2 provides a detailed list of the posters by sessions.

Part of the presentations will take place in parallel sessions by topic, in 2 rooms and will be organized as follows:

Date	Time	Room 1	Room 2
Monday 6 October	15.00 – 18.00	Registration	
Tuesday 7 October	08.00 – 09.15	Registration	
	09.15 – 10.00	Opening Ceremony	
	10.00 – 10.30	Overview paper	
	11.00 - 12.20	1A- Trends in hydrological regimes and extremes	1B- Water resources and prospective scenarios
	14.00 – 15.20	2A- Trends in hydrological regimes and extremes	2B- Water resources and prospective scenarios
	15.20 – 16.00	<i>Coffee break</i> - Posters Session 1	
	16.00 – 17.00	3A- Trends in hydrological regimes and extremes	3B- Water resources and prospective scenarios
	17.00 – 18.30	Posters Session 1, continuation	
	17.00 – 19.00	FRIEND-Water Intergroup Coordination Committee (FIGCC) meeting	
	Wednesday 8 October	09.00 – 10.20	4A- Trends in hydrological regimes and extremes
11.00 - 12.20		5A- Trends in hydrological regimes and extremes	5B- Water resources and prospective scenarios
14.00 – 15.20		6A- Trends in hydrological regimes and extremes	6B- Erosion and sediment transport processes and trends
15.20 – 16.00		<i>Coffee break</i> - Posters Session 2	
16.00 – 17.20		7- Trends in hydrological regimes and extremes	
17.20 – 18.30		Posters Session 2, continuation	
19.00 – 20.00		<i>Wine Degustation</i>	
20.00 – 23.00		Gala Dinner	
Thursday 9 October	FRIEND-Water Regional groups meeting & Aquarium Guided Tour		
Friday 10 October	09.00 – 10.20	8A- Hydrological databases: how to cope with future questions	8B- Regional observational hydrological modelling frameworks
	11.00 - 12.20	9A- Hydrological databases: how to cope with future questions	9B- Regional observational hydrological modelling frameworks
	14.00 – 15.20	10A- Hydrological databases: how to cope with future questions	10B- Changes in ecological flows and coastal ecohydrology
	16.00 – 16.30	Closing Ceremony	

Side Events

Preliminary list of side events:

- Meetings of FRIEND-Water Regional groups (depending on the Regional Coordinators)
- FRIEND-Water Intergroup Coordination Committee (FIGCC) meeting

Meeting rooms are available at [HydroSciences Montpellier Laboratory](#) on Thursday 9 October. Please, contact the Local Organizing Committee for the access to these facilities.

Hotels - Transport

Find your accommodation and prepare your venue to the Mare Nostrum Montpellier Agglomeration Aquarium with the FRIEND Conference web site at: <http://www.im2e.org/>. Delegates can log on for booking hotels, tours and / or activities.

International Scientific Committee

Trevor Daniell (Chairperson, Australia)
Siegfried Demuth (UNESCO Paris)
Hafzullah Aksoy (Turkey)
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Local Organizing Committee

Sandra Ardoin-Bardin (France)
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Alain Dezetter (France)
Eric Servat (France)

ANNEX 1: FRIEND-Water 2014 Conference Program

Monday, October 6th, 2014

15.00-18.00 *Opening registration*

Tuesday, October 7th, 2014

08.00-09.15 *Registration*

09.15-10.00 **Opening ceremony**

UNESCO Representative - S. DEMUTH

FIGCC Representative - H. VAN LANEN

IAHS Representative - E. SERVAT

IM2E Representative - E. SERVAT

10.00-10.30 **Over 25 years of FRIEND-Water**

HENNY A.J. VAN LANEN, SIEGFRIED DEMUTH, TREVOR DANIELL, DAVID M. HANNAH, GREGOR LAAHA, GIL MAHE & LENA M. TALLAKSEN

10.30-11.00 *Coffee break*

11.00-12.00 **Session 1A: Trends in hydrological regimes and extremes**

11.00-11.20 Regional assessment of low flow processes and prediction methods across European regimes

GREGOR LAAHA, ANNE F. VAN LOON, CLAIRE LANG DELUS & DANIEL KOFFLER

11.20-11.40 Progressive aridity impact on the hydrological regime on the Volta river basin in Benin (West Africa)

HENRI S.V. TOTIN, ARNAUD ZANNOU, ERNEST AMOUSSOU, ABEL AFOUDA & MICHEL BOKO

11.40-12.00 Multi-annual droughts in the water-stressed English lowlands: long-term variability and climate drivers

JAMIE HANNAFORD, CHRIS K. FOLLAND, MIKE C. KENDON, JOHN P. BLOOMFIELD

11.00-12.00 **Session 1B: Water resources and prospective scenarios**

11.00-11.20 Environmental and geomatics assessment of the Ha Thanh basin to hydrological hazards in central Vietnam

STEPHANE GRIVEL, ANH TU NGO, JEAN-MARC ZANINETTI & THI VAN LUONG

11.20-11.40 Forecasting and mitigation of flooding in a Mediterranean karstic watershed

V. BORRELL-ESTUPINA, B. LADOUCHE, P.-O. MALATERRE, S. RICCI, Y. CABALLERO, M. COUSTAU, N. DORFLIGER, P. FLEURY, M. JAY-ALLEMAND, J.-C. MARECHAL, O. THUAL

11.40-12.00 A multi-tracer approach to understand the hydrogeochemical functioning of a coastal aquifer located in NE Tunisia

FETHI LACHAAL, ANIS CHEKIRBANE, AMMAR MLAYAH, BILEL HJIRI & JAMILA TARHOUNI

12.20-14.00 *Lunch break*

14.00-15.20 **Session 2A: Trends in hydrological regimes and extremes**

14.00-14.20 Understanding and adapting to flood risk in a variable and changing climate

ANTHONY S. KIEM

14.20-14.40 Trends in floods in small Norwegian catchments – instantaneous vs. Daily peaks

- DONNA WILSON, HEGE HISDAL & DEBORAH LAWRENCE
14.40-15.00 Climate change impact on flood generation process
- BILJANA RADOJEVIC & PASCAL BREIL
15.00-15.20 Flood duration frequency analysis in a changing climate: the methodology applied to Fengele River (Yangtze Basin, China)
C. SALLES, Y. CHU, J. L. PERRIN, M. G. TOURNOUD, L. BOUDET, F. N. CRES, C. RODIER, S. ZHENG L. HUANG & Y. MA
- 14.00-15.20 Session 2B: Water resources and prospective scenarios**
- 14.00-14.20 Assessing past and future water demands under climate change and anthropogenic pressures on two Mediterranean basins
B. GROUILLET, J. FABRE, D. RUELLAND, L. COLLET, J-F BOYER
- 14.20-14.40 L'aménagement des barrages de retenue d'eau, une stratégie d'adaptation à la sécheresse dans le bassin du fleuve Niger ?
G. LIENOU, G. MAHE, S.L. PIIH, D. SIGHOMNOU, J.E. PATUREL, F. BAMBA
- 14.40-15.20 Assessing the long-term evolution of water supply capacity: comparison of two Mediterranean catchments
J. FABRE, L. COLLET, M. MILANO, D. RUELLAND, A. DEZETTER, S. ARDOIN-BARDIN, E. SERVAT
- 15.20-16.00 *Coffee break - Session Posters 1*
- 16.00-17.00 Session 3A: Trends in hydrological regimes and extremes**
- 16.00-16.20 Future low flows and hydrological drought: how certain are these for Europe?
MARCEL A. A. ALDERLIESTE, HENNY A. J. VAN LANEN & NIKO WANDERS
- 16.20-16.40 Analyse des périodes sèches dans le bassin d'Ichkeul (Tunisie) à partir de données journalières de pluviométrie
MAJID MATHLOUTHI, FETHI LEBDI
- 16.40-17.00 Changes of drought characteristics in small Czech and Slovakian catchments projected by the CMIP5 GCM ensemble
MARTIN HANEL, ADAM VIZINA, MARTA MARTINKOVA, STANISLAV HORAČEK, DIANA PORUBSKA, MARIAN FENDEK & MIRIAM FENDEKOVA
- 16.00-17.00 Session 3B: Water resources and prospective scenarios**
- 16.00-16.20 Assessing the capacity to meet irrigation water needs for viticulture under climate variability in the Chilean Andes
P. HUBLART, D. RUELLAND, A. DEZETTER & H. JOURDE
- 16.20-16.40 Present-day surface and subsurface water resources of European Russia: conditions, use and forecast
R. DZHAMALOV, N. FROLOVA, M. KIREEVA & E. RETS
- 16.40-17.00 La prospective territoriale, un outil de réflexion sur la gestion de l'eau du bassin de la Durance en 2050
R. SAMIE, Y. ARAMA, H. BOUSCASSE & E. SAUQUET
- 17.00-18.30 Session Posters 1, continuation.**
- 17.00-19.00 FRIEND-Water InterGroup Coordination Committee (FIGCC) meeting**

Wednesday, October 8th, 2014

09.00-10.20 **Session 4A: Trends in hydrological regimes and extremes**

- 09.00-09.20 **Impact of land-use change on the hydrology of North Lao PDR watersheds**
EMMANUEL MOUCHE, FRANCOIS MOUSSU, CLAUDE MUGLER, OLIVIER RIBOLZI, CHRISTIAN VALENTIN, OLOTH SENGTAHEVANGHOUNG & GUILLAUME LACOMBE
- 09.20-09.40 **Assessment of wildfire impact on hydrological extremes in eastern Siberia**
LYUDMILA LEBEDEVA & OLGA SEMENOVA, NINA VOLKOVA
- 09.40-10.00 **Do large-scale models capture reported drought events?**
MARJOLEIN H.J. VAN HUIJGEVOORT, HENNY A.J. VAN LANEN, ADRIAAN J. TEULING, REMKO UIJLENHOET
- 10.00-10.20 **Linking variations in large-scale climatic circulation and high groundwater levels in southern England**
DAVID A. LAVERS, DAVID M. HANNAH & CHRIS BRADLEY

09.00-10.20 **Session 4B: Water resources and prospective scenarios**

- 09.00-09.20 **Modifications des températures et des précipitations sur le Bani, un sous-bassin du fleuve Niger**
JEAN-EMMANUEL PATUREL & MALICKI ZOROM
- 09.20-09.40 **A reconnaissance study of water and carbon fluxes in a tropical watershed of Peninsular Malaysia: stable isotope constraints**
MUHAMMAD I.SYAKIR, KERN.Y.LEE, IAN D. CLARK, JAN VEIZER
- 09.40-10.00 **Characterizing infiltration of a tropical watershed from ALOSPALSAR data using the Green-Ampt infiltration model**
NOR LIYANA MOHAMMAD KHAN, MUHAMAD ASKARI & AB. LATIF IBRAHIM

10.20-11.00 *Coffee break*

11.00-12.20 **Session 5A: Trends in hydrological regimes and extremes**

- 11.00-11.20 **Rainfall Regime Evolution and Drought Forecasting in Eastern Algeria**
MOHAMED MEDDI & ABDELWAHAB RAHMOUNI
- 11.20-11.40 **Up-to-date climate forced seasonal flood changes (the case study for the European part of Russia)**
NATALIA FROLOVA, MARIA KIREEVA, DMITRY NESTERENKO, SVETLANA AGAFONOVA & PAVEL TERSKY
- 11.40-12.00 **Optimal reservoir operation strategy for balancing ecosystem and human needs**
FI-JOHN CHANG, WEN-PING TSAI, YU-CHUNG WANG, PIN-AN CHEN, LI-CHIU CHANG, ALEXANDRA COYNEL & GEORGES VACHAUD
- 12.00-12.20 **Synthesizing changes in low flows from observations and models across scales**
KERSTIN STAHL, JEAN-PHILIPPE VIDAL, JAMIE HANNAFORD, CHRISTEL PRUDHOMME, GREGOR LAAHA, LENA M. TALLAKSEN

11.00-12.20 **Session 5B: Water resources and prospective scenarios**

- 11.00-11.20 **Conceptual model of Abidjan Continental Terminal aquifer**
AUGUSTE K. KOUASSI, FRANCIS W. KOUASSI, JULES O. M. MANGOUA & ISSIAKA SAVANE
- 11.20-11.40 **Characterization and evaluation of the confined limestone aquifer in Kuwait**
FAWZIA M. AL-RUWAIH
- 11.40-12.00 **Etude géochimique et isotopique d'un aquifère phréatique côtier anthropisé : Nappe de Oussja-Ghar El Melah (Tunisie)**
SAFOUAN BEN AMMAR, JEAN-DENIS TAUPIN, KAMEL ZOUARI, MOHAMED KHOUATMIA & MOHAMED BEN ASSI

12.20-14.00 *Lunch break*

- 14.00-15.20 Session 6A: Trends in hydrological regimes and extremes**
- 14.00-14.20 Recent trends in monthly temperature and precipitation in Europe
IRENE B.NILSEN, ANNE K. FLEIG, LENA M. TALLAKSEN & HEGE HISDAL
- 14.20-14.40 Unidirectional trends in rainfall and temperature of Bangladesh
SHAMSUDDIN SHAHID, XIAO-JUN WANG & SOBRI B. HARUN
- 14.40-15.00 Sensitivity analysis of hydrological modelling to climate forcing in a semi-arid mountainous catchment
D. RUELLAND, A. DEZETTER & P. HUBLART
- 15.00-15.20 Prediction of water resources in the Chao Phraya River Basin, Thailand
SUPATTANA WICHAKUL, YASUTO TACHIKAWA, MICHIHARU SHIIBA & KAZUAKI YOROZU
- 14.00-15.20 Session 6B: Erosion and sediment transport processes and trends**
- 14.00-14.20 Using ¹³⁷Cs and ²¹⁰Pbex measurements to document erosion rates for different time windows in a small catchment in southern Italy
PAOLO PORTO & DESMOND E. WALLING
- 14.20-14.40 Lessons from long-term monitoring of soil erosion in three Southeast Asian agricultural catchments undergoing rapid land use changes
C. VALENTIN, A. BOONSANER, J.L. JANEAU, P. JOUQUET, T. HENRY DES TUREAUX, S. HUON, K. LATSACHACK, Y. LE TROQUER, J.L. MAEGHT, D. ORANGE, PHAM DINH RINH, A. PIERRET, P. PODWOJEWSKI, O.RIBOLZI, A. DE ROUW, O.SENGTAEHUANGHOUNG, N. SILVERA, H. ROBAIN, B. SOULILEUTH, W. THOTHONG, TRAN DUC TOAN, TRAN SYHAI
- 14.40-15.00 Study of the relationship between sediment transport and rainfall extremes (and associated hydrological) in the watershed of the wadi Mina (northwest of Algeria)
F. HALLOUZ, M. MEDDI & G. MAHE
- 15.00-15.20 "Blue-green" corridors as a tool for erosion and stream control in highly urbanized areas – case study of Belgrade city
RATKO RISTIĆ, BORISRADIĆ, GORAN TRIVAN & IVAN MALUŠEVIĆ
- 15.20-16.00 *Coffee break - Session Posters 2*
- 16.00-17.20 Session 7: Trends in hydrological regimes and extremes**
- 16.00-16.20 Amélioration de la connaissance du fonctionnement d'hydrosystèmes karstiques par réseaux de neurones : identification des zones contributives aux crues rapides du Lez
THOMAS DARRAS, VALÉRIE BORRELL ESTUPINA, LINE KONG-A-SIOU, BERNARD VAYSSADE, ANNE JOHANNET, SÉVERIN PISTRE
- 16.20-16.40 Statistical analysis of river discharge projected using the MRI-AGCM3.2S dataset in Indochina Peninsula
D. T. DUONG, Y. TACHIKAWA, M. SHIIBA & K. YOROZU
- 16.40-17.00 Extreme precipitation events and related impacts in Western Iberia
MARGARIDA L. R. LIBERATO & RICARDO M. TRIGO
- 17.00-17.20 Produits phytosanitaires et ruissellement : méthodologie pour une caractérisation de l'impact environnemental. Application aux Gardons (Sud de la France)
VALÉRIE BORRELL ESTUPINA, MARINE ROUSSEAU, AWA GUEYE, EMMANUELLE CADOT
- 17.20-18.30 Session Posters 2, continuation.**
- 19.00-20.00 Wine degustation – [Maison des Vins du Languedoc](#), Mas de Saporta, 34970 Lattes**
Registered only (limited places)
Transport by shuttle, departure at 18.30 from Odysseum

20.00-23.00 **Gala dinner – [Les Cuisiniers Vignerons](#), Mas de Saporta, 34970 Lattes**
Registered only
Transport by shuttle, departure at 19.30 from Odysseum, return at 23.30 to Odysseum

Thursday, October 9th, 2014

FRIEND-Water Regional Groups meeting (EURO, AOC, MED)

Aquarium Guided Tour

Friday, October 10th, 2014

09.00-10.20 **Session 8A: Hydrological databases: how to cope with future questions**

09.00-09.20 Ensuring hydrometric data are fit-for-purpose through a national Service Level Agreement

KATIE MUCHAN & HARRY DIXON

09.20-09.40 Future Flows: a dataset of climate, river flow and groundwater levels for climate change impact studies in Great Britain

C. PRUDHOMME, C. JACKSON, T. HAXTON, S. CROOKS, S. DADSON, D. MORRIS, J. WILLIAMSON, A. BARKWITH, J. KELVIN, J. MACKAY, L. WANG, G. GOODSSELL, L. BOELEEE, H. DAVIES, G. BUYS, T. LAFON, A. YOUNG, G. WATTS

09.40-10.00 Architecture of environmental information systems applied to scientific observatories: examples of Carnoulès and MEDYCYSS observatories

J.F. BOYER, E. SERVAT, C. CASIOT & H. JOURDE

10.00-10.20 Cooperative WebGIS interactive information systems for water resources data management

CHARALAMPOS SKOULIKARIS, JACQUES GANOULIS, NIKOLAOS KARAPETSAS, FOTIS KATSOGIANNOS & GEORGIOS ZALIDIS

09.00-10.20 **Session 8B: Regional observational-hydrological modelling frameworks**

09.00-09.20 Connecting streamflow and atmospheric conditions in Europe: state-of-the-art review and future directions

DAVID M. HANNAH, ANNE K. FLEIG, DANIEL G. KINGSTON, JAMES H. STAGGE, DONNA WILSON

09.20-09.40 Measurement, modelling and analysis of hydrological and hydrogeological processes and trends in a marsh area

BRANKA BRACIC ZELEZNIK & LIDIJA GLOBEVNIK

09.40-10.00 Which catchment characteristics influence the temporal dependence structure of daily river flows?

CHIVERTON, A., J. HANNAFORD, I. HOLMAN, R. CORSTANJE, C. PRUDHOMME, J. BLOOMFIELD, T. M. HESS

10.20-11.00 *Coffee break*

11.00-12.20 **Session 9A: Hydrological databases: how to cope with future questions**

11.00-11.20 Towards a pan-European assessment of low flow indices

CLAIRE LANG DELUS, GREGOR LAAHA, DANIEL KOFFLER, KERSTIN STAHL, HEGE HISDAL, CHRISTEL PRUDHOMME, MIRIAM FENDEKOVA, WOJCIECH JAKUBOWSKI

11.20-11.40 Selecting an optimal climatic dataset for integrated modelling of the Ebro hydrosystem

A. DEZETTER, J. FABRE, D. RUELLAND, E. SERVAT

- 11.40-12.00 Growing season length and rainfall extremes analysis in Malawi
COSMO NGONGONDO, LENA M.TALLAKSEN, CHONG-YU XU
- 12.00-12.20 Standardized precipitation-evapotranspiration index (SPEI): Sensitivity to potential evapotranspiration model and parameters
JAMES H. STAGGE, LENA M. TALLAKSEN, CHONG-YU XU, & HENNY A.J. VAN LANEN
- 11.00-12.20 Session 9B: Regional observational-hydrological modelling frameworks**
- 11.00-11.20 Les lacs collinaires en Tunisie : Technique de conservation des eaux et du sol
HAMADI HABAIEB, TAOUFIK HERMASSI, SLAHEDDINE GHEDAOU, ISSAM ANATAR
- 11.20-11.40 Application of hydrological model to evaluate the potential hydro energy in a mountainous small river basin of Japan
KAZUMASA FUJIMURA, MASAHIRO MURAKAMI, YOSHIHIKO ISERI & SHINJIRO KANAE
- 11.40-12.00 Influence des activités anthropiques sur le régime hydrologique du fleuve Logone de 1960 à 2000
N.T. WAI, B.N. NGATCHA, G.MAHE, J.C DOUMNANG, F.DELCLAUX, G. NGOLONA & P.GENTHON
- 12.00-12.20 Estimation of runoff curve numbers using a physically-based approach of preferential flow modelling
PORI DAS, AMINUL ISLAM, SUBASHISA DUTTA, AMIT K. DUBEY & RUPAK SARKAR
- 12.20-14.00 *Lunch break*
- 14.00-15.20 Session 10A: Hydrological databases: how to cope with future questions**
- 14.00-14.20 Probability distribution of rainfall in the Bia watershed: contribution of Markov chains
MELEDJE N'DIAYE HERMANN, KOUASSI KOUAKOU LAZARE, NGO YAO ALEXIS, SAVANE ISSIACA
- 14.20-14.40 Predicting soil water retention characteristics for Vietnam Mekong Delta soils
NGUYEN M. PHUONG, LE V. KHOA, WIM CORNELIS
- 14.00-15.20 Session 10B: Changes in ecological flows and coastal ecohydrology**
- 14.00-14.20 Hydrological regime of a tidal system in the Red River Delta, Northern Vietnam
LUU THI NGUYET MINH, DIDIER ORANGE, TRAN HONG THAI, JOSETTE GARNIER, LE LAN ANH, TRINH ANH DUC
- 14.20-14.40 Measuring impact of water management on ecological health of a river: Poudre River, Colorado, USA
ROBERT T. MILHOUS
- 14.40-15.00 Impact of climate change on aquatic ecosystems along the Asse river network
THOMAS CIPRIANI, FRANCOIS TILMANT, FLORA BRANGER, ERIC SAUQUET & THIBAUT DATRY
- 15.00-15.20 Ecological flow for integrated planning of small hydropower plants: a case study from Greece
THOMAS PATSIALIS, CHARALAMPOS SKOULIKARIS & JACQUES GANOULIS
- 15.20-16.00 *Coffee break*
- 16.00-16.30 Closing ceremony**

ANNEX 2: FRIEND-Water 2014 list of posters by sessions

POSTER SESSION 1, Tuesday, October 7th, 2014

15.20-16.00 During coffee break

17.00-18.30 Continuation

- The analysis of functioning the maximal and annual runoff in different climates
ASABINA, E. (Elena)
- Niger-HYPE: How may climate change affect floods and droughts in the Niger River basin?
ANDERSSON, J.C.M. (Jafet), ALI, A. (Abdou), ARHEIMER, B. (Berit), TRAORÉ, F. (Farid)
- Agricultural and water resources drought: differences
BOER, F. DE (Froukje), HENNY A.J. VAN LANEN
- Recovery of different drought types
BOLEIJ, J. (Johan), GEORGE BIER, HENNY A.J. VAN LANEN
- Ruissellement et plans communaux de sauvegarde : méthodologie opérationnelle d'identification générique des secteurs exposés au risque de submersion. Application au Sud de la France.
BORRELL ESTUPINA, V. (Valérie), HAZIZA, E. (Emma)
- Understanding climate changes in Southern Italy using the rainfall erosivity factor of the USLE
CAPRA, A. (Antonina), V. COGLIANDRO (Vanessa), D. FOSCO (Daniele), C. LA SPADA. (Camedo), P. PORTO (Paolo)
- Assessment of annual and monthly rainfall in semi-arid region within the climatic change context (study case: Serrat basin, central Tunisia)
CHARGUI, S. (Sameh), H. GHARBI (Hana), M.ABIDI (Mouhamed), A.MLAYAH (Ammar), F.LACHAAL (Fethi), S. KHADHAR (Samia), M. SLIMANI (Mohamed)
- Human-induced alterations of extreme water level in the Pearl River Delta, South China
CHEN, Y.D. (Yongqin David), QIANG ZHANG
- Influence of drought conditions on aquatic habitat quality in the upper Nitra River Basin in Slovakia
FENDEKOVA, M. (MIRIAM), M. FENDEK (Maria), V. MACURA (Viliam), J.KRALOVA (Jana)
- Analysis of daily and monthly rainfall in north Algeria
GHENIM, A.N. (ABDERRAHMANE NEKKACHE), ABDESSELAM MEGNOUNIF
- Statistical analysis for modeling the hydrological risks in Latin America and the Caribbean
GUTIÉRREZ A. (Alfonso), PLANOS, E. (Eduardo)
- Trend changes in extreme and monthly stream flow of the Vah River
HALMOVA D., PEKAROVA P., MIKLANEK P.
- Is the Cox-Stuart test for trend really insensitive to autocorrelation?
LEDVINKA, O. (Ondrej)
- FRIEND-Water Discharge Data at the WMO Global Runoff Data Centre (GRDC)
LOOSER U., I. DORNBLUT
- Trends in droughts during crop growing periods of Bangladesh
MD. MAHIUDDIN ALAMGIR, SHAMSUDDIN SHAHID
- Probability distribution of rainfall in the Bia watershed: contribution of Markov chains
MELEDJE, D.H. (Hermann), KOUASSI KOUAKOU LAZARE, NGO YAO ALEXIS, SAVANE ISSIAKA
- Annual maximum stream flows of the Danube River in 1876–2005
MIKLANEK, P. (Pavol), PAVLA PEKAROVA, JAN PEKAR, IVAN MESZAROS
- Recorded changes over hydrological extremes of Oubangui at Bangui (Central African Republic): trends analysis

NGUIMALET C.-R. (CYRIAQUE-RUFIN)

- **Water resources in the Red River Delta (Northern Vietnam) and prospective scenarios**
NGUYET MINH, L.T. (LUU THI), DIDIER ORANGE, JULIEN NEMERY, LE THI PHUONG QUYNH, TRINH ANH DUC, LE LAN ANH, JOSETTE GARNIER
- **Changements climatiques et mutations agraires dans les paysanneries de l'Est ivoirien**
NOUFE, D. (Dabissi), ERIC SERVAT, BRUNO LIDON, ISSIAKA SAVANE, TIE ALBERT GOULA BI
- **Analysis of climate variability in Enugu state Nigeria using 30 years rainfall and temperature data**
OKORIE, F. (Fidelis), NNAJI Austine, EZEDIKE Cyprain, CHIBO Christian
- **Trends in Rainfall and Rainfall Related Extremes in the East Coast of Malaysia**
OLANIYAN, OLUSEGUN MAYOWA, SHAMSUDDIN SHAHID
- **Modelling flash floods in a karstic watershed using an original semi-distributed radar-gauge merging method**
RAYNAUD, F. (Felix), VALERIE BORRELL-ESTUPINA, ALAIN DEZETTER, SEVERIN PISTRE, HELENE MATHIEUSUBIAS
- **Étude et caractérisation des échanges entre karst et rivières : cas de la Cèze et de ses échanges avec le plateau de Méjeannes-le-Clap (France, Gard).**
RÉ-BAHUAUD, J., H. CHAPUIS, B. GUY, D. GRAILLOT, F. PARAN, S. GAUR, J. JOLIVET, M. SAVARY, A. JOHANNET, D. SALZE, B. VAYSSADE; M. VINCHES, L. CADILHAC
- **Assessment of the hydrological regime in the Upper Don River Basin under a changing climate**
SENTSOVA, N. (Nadezda)
- **Groundwater pollution and the safe water supply challenge in Cotonou coastal town, Benin (West Africa)**
TOTIN, H.S.V. (Henri), LEOCADIE ODOULAMI, PATRICK A. EDORH, MOUSSA BOUKARI
- **Regulation effects of reservoir system on flow regime in Red River downstream**
THUY NGO T. (Thi), THU PHUONG TRINH, HUU DUNG LUONG, JOONG HOON KIM
- **Climate change impacts on the seasonal distribution of runoff in Niigata Prefecture, northern Japan**
WHITAKER, A.C. (Andrew), HIRONOBU SUGIYAMA, YUKI SAWAGUCHI

POSTER SESSION 2, Wednesday, October 8th, 2014

15.20-16.00 **During coffee break**

17.20-18.30 **Continuation**

- **Les modèles mathématiques : outils de gestion des systèmes aquifères. Application à la nappe alluviale de Maghnia (NW Algérie)**
BABA-HAMED, K. (Kamila), BOUANANI ABDERRAZAK, AZIZ HADJIRA, MEGUENNI TANI MERIEM
- **Réutilisation des bouteilles en plastique pour l'irrigation des palmiers dattiers**
BENLARBI, D. (Dalila), SAGGAI (Sofiane)
- **Estimation et modélisation des transports solides en suspension dans l'Oued Boumessaoud (Tafna- NW algérien)**
BOUANANI, A. (Abderrazk), A. BOUGUERRA SID (Ahmed), K. BABA-HAMED (Kamila)
- **Apport de la géochimie et des isotopes dans l'étude de nappes de vallée andine en zone anthropisée : vallée d'Aburra - Medellin (Colombie)**
CAMPILLO, A.K., J.D. TAUPIN, N. PATRIS, T. BETANCUR

- Using spot gauging data to estimate the annual minimum monthly flow with a return period of 5 years in France
CATALOGNE, C. (Clotaire), E.SAUQUET (Eric), M. LANG (Michel)
- A web-based information portal and (real time) decision support system for flood control and water resources management
DAHM, R.J. (Ruben), A. VAN LOENEN, A. LESKENS
- Natural and anthropogenic factors on the mechanical erosion in the Red River (Vietnam): temporal and spatial variability of sediment transport
DANG, T.H. (Thi Ha), A. COYNEL (Alexandra), D. ORANGE (Didier), A. MARACHE (Antoine), H. ETCHEBER (Henri)
- Nitrate pollution risk of Quaternary groundwater in the southern part of Abidjan District (Cote d'Ivoire)
DOUAGUI, A. (Aristide), ISSIAKA SAVANE, INNOCENT KOUAME
- The 'streampower' as predictor in assessing the sediment concentration in interrill overland flow
GABRIELS, D. (Donald), D. LOBO
- Geophysical Techniques to Aquifer Locating and Monitoring, case study for Industrial Zones in North Hanoi, Vietnam
GIANG, N.V., N.B.DUAN, L.N.THANH, NOBORU HIDA
- Mise en évidence de la dynamique des aquifères en zone montagneuse dans la région de Bucaramanga (Colombie) par l'usage de la géochimie isotopique
GOMEZ, S. (Sully), JEAN DENIS TAUPIN, JOSE ALFREDO RUEDA
- Long-term observation records on hydraulic head and groundwater temperature in snowfall Northern Japan - what is revealed
HIDA, N. (Noboru), NGUYEN VAN GIANG
- Estimation of Evapotranspiration from Pasoh Forest Reserve in Malaysia using Remote Sensing Data
IBRAHIM, A.I., M. H. P. RAMLI, T. H. TAM
- Bilan hydrologique du bassin versant de l'Agneby (Cote d'Ivoire) : application du modèle hydrologique nTopAmm
KAMAGATE, B. (BAMORY), LUC SEGUIS, ZILE ALEX KOUADIO, CHRISTOPHE PEUGEOT, ISSIAKA SAVANE, TIE ALBERT GOULA BI
- Hydrologie et hydrochimie des eaux dans la zone de construction du chenal du port de pêche de Grand-Lahou, Cote d'Ivoire
KOUAKOU SÉRAPHIN Konan, KOUASSI Kouakou Lazare, KOUAME Kouassi Innocent, KOUASSI Aka Marcel, GNAKRI Dago
- Network of Russian and former Soviet research watersheds as a framework for comprehensive model evaluation and improvement
LEBEDEVA, L. (Lyudmila), OLGA SEMENOVA
- Ecohydrology, sedimentation & sustainable sediment management options in inland water bodies in Ethiopia: A review
LIGDI, E.E. (Etafa Emama), MOHSSINE EL KAHLOUN
- Near real-time remotely sensed data for flood monitoring and forecasting
MASON, D.C. (David), JAVIER GARCIA-PINTADO, SARAH L. DANCE, HANNAH L. CLOKE
- Characterization of sediment and physical chemistry of Ayame Lake
MELEDJE N'DIAYE, H. (Hermann), KOUASSI KOUAKOU LAZARE, NGO YAO ALEXIS, SAVANE ISSIAKA
- Buffering Capacity of Constructed and Manipulated Wetland: Case Study Kirinya Wetland, northern Lake Victoria
MUYODI (Fredrick J.), MOHSSINE EL KAHLOUN, EPHRAIM N. BANADDA & PATRICK MEIRE
- Assessment of the environmental risk of glyphosate herbicide and its metabolite AMPA in the canals, surface water at Saigon - Dong Nai and Mekong Delta

NHU-TRANG, T. (Tran-Thi), TRUONG LAM SON HAI, DIDIER ORANGE, CAMILLE PICQUART

- **A framework for evaluating local climate impacts on the surface-water balance and the hydrological regime in the Vu Gia-Thu Bon basin in Central Vietnam**
PHUONG NGUYEN, JOHANNES CULLMANN, PATRICK LAUX
- **Water sources and flow paths in a forested catchment of the East Asian monsoon region**
PAYEUR-POIRIER, J-L (Jean-Lionel), LUISA HOPP, STEFAN PEIFFER
- **The evaporation reduction of Algerian open water storages by monolayers**
SAGGAI, S., D. BOUTOUTAOU
- **Hydrological monitoring and the formation of hydrological data bases in the Republic of Belarus**
SHEVTSOVA, N. (Natali), VICTAR MELNIK, YURY LIASNICHY
- **Model development for analysis of nitrate leaching and its field application in a rural area**
SUK, H. (Heejun), KIM YONGCHEOL
- **Flood Hazard Assessment in Kota Tinggi, Malaysia**
TAM, T.H., Ab. L. IBRAHIM, M. Z. A. RAHMAN, M. ZULKLIFI
- **Nonuniform sediment transport and flow characteristics downstream of a hydraulic structure**
TERMINI, D. (Donatella)
- **Quantification et analyse multivariée de l'érosion hydrique en région méditerranéenne (cas du bassin versant Isser, Algérie)**
ZEGGANE, H. (HOUARI), DJAMEL BOUTOUTAOU