International Workshop on Remote Sensing and Eco-hydrology in Arid Regions on September 16-20, 2013 in Beijing, China

(Second Circular)

1. Introduction

International workshop on remote sensing and eco-hydrology in arid regions will be held on September 16-20, 2013 in the Institute of Atmospheric Physics, Chinese Academy of Sciences, Beijing, China. This workshop is co-sponsored by United Nations Educational, Scientific and Culture Organization (UNESCO), Monsoon Asia Integrated Regional Study (MAIRS), Chinese Academy of Science (CAS), National Natural Science Foundation of China (NSFC), Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), CAS, and Institute of Atmospheric Physics (IAP), CAS.

Water resources are precious in arid regions and severe water scarcity is the principle factor that constrains the development of local economy and deteriorates local ecology conditions. Globally, arid and semi-arid areas face the greatest pressures to deliver and manage freshwater resources. It has been estimated that by the 1990s 40% of the world's population were suffering from serious water shortages and this is set to increase, with two-thirds of the population living under water stress by 2025.

In wake of the importance of limited water resources in maintaining ecological balance and assuring sustainable socio-economic development and the increasing conflicts of water demands between social sectors and river reaches, it demands an integrated river basin management to coordinate water uses. As in arid regions, the runoff generation and evapotranspiration consumes are strongly related to ecological processes such as vegetation spatial variations and structural dynamics, it is critical to understand the inherent laws of eco-hydrological processes, quantitatively formulating the formation and consumption of water resources. For this purpose, a traditional hydrological model shall integrate ecological components and take advantage of new data sources and techniques such as remote sensing, in order to

improve its predictable accuracy.

2. Objectives

This workshop aims to strengthen the global capacity to manage the water resources of arid and semi-arid areas. Its primary goal is to communicate and exchange the successful experiences on the application of remote sensing for water management and the study of eco-hydrology in arid regions.

Specific objectives include:

- improved understanding of the special characteristics of hydrological systems and water management needs in arid areas
- capacity building of individuals and institutions, matching supply with need
- broad dissemination of understanding of water in arid zones to the user community and the public
- sharing data and exchanging experience to support research and sound water management
- raising awareness of advanced technologies for data provision, data assimilation, and system analysis
- promoting integrated basin management and the use of appropriate decision support tools.

3. Main Topics

- Satellite remote sensing data and programme
- Remote sensing applications to eco-hydrology in arid regions
- Integrated study of ecological and hydrological processes in inland river basins
- Ecological security, water resource sustainable utilization and integrated river basin management in arid regions

4. Call for participation

Scientists, managers, students as well as representatives of governments, media and funding organizations, who are interested in hydrology, ecology and sociology for arid and semi-arid regions are invited to the workshop to share research results and to discuss sustainable development in arid regions. The official language of the workshop will be English.

5. Sponsors

United Nations Educational, Scientific and Cultural Organization (UNESCO)
Monsoon Asia Integrated Regional Study (MAIRS)
Chinese Academy of Sciences (CAS)
National Natural Science Foundation of China (NSFC)
Cold and Arid Regions Environmental and Engineering Research Institute (CAREERI), CAS
Institute of Atmospheric Physics (IAP), CAS

6. Committee and secretary

Scientific Advisory Committee

Guodong Cheng	Cold and Arid Regions Environmental and Engineering Research Institute, CAS, China
Congbin Fu	Institute of Atmospheric Physics (IAP), CAS
Bojie Fu	Research Center for Eco-Environmental Sciences, CAS, China
Huadong Guo	Institute of Remote Sensing and Digital Earth, CAS, China
Changqing Song	National Natural Science Foundation of China, Deputy Director of Geoscience Directorate, China
Soroosh Sorooshian	University of California, USA
Abdin Salih	IHP/UNESCO; University of Khartoum, Sudan
Mike Edmunds	University of Oxford, UK
Howard Wheater	University of Saskatchewan, Canada
Ramasamy Jayakumar	United Nations Educational, Scientific and Cultural Organization

Organization Committee

Xin Li	Cold and Arid Regions Environmental and Engineering Research Institute, CAS
Shuying Leng	National Natural Science Foundation of China
Zhuotong Nan	Cold and Arid Regions Environmental and Engineering Research Institute, CAS
Ailikun	Institute of Atmospheric Physics (IAP), CAS
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Secretary

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7. Venue

Institute of Atmospheric Physics (IAP), Chinese Academy of Sciences, Beijing, China
Address: 40# Hua Yan Li, Qi JiaHuoZi, Chaoyang District, Beijing, P.R. China
Postcode: 100029
Meeting room: 101
Tel: +86-10-62028608/+86-10-82995018
Fax: +86-10-62028604

8. Accommodation

Local organizers will help to reserve hotel room for each participant.

a) Hotel name: Foreign Experts Building Beijing (named Hotel_A on the map)
NO.8 Huayanbeili, Chaoyang District, Beijing, P.R. China.
Postcode:100029
Tel: +86 1082858888
Fax: +86 1082845589

b) Hotel name: Holiday Inn Express Beijing Minzuyuan (named Hotel_B on the map)
No. 1 Minzuyuan Road, Chaoyang District, Beijing, P.R. China
Postcode: 100101
Tel: +86 10 59269090

9. Travel information

1) Take taxi: you are strongly advised to print out the following words in Chinese and show these words to driver:

宾馆名字：北京外国专家大厦
地　　址：华严北里 8 号，朝阳区，北京
联系电话：13919186957

(For Hotel a)

宾馆名字：北京民族园智选假日酒店
地　　址：民族园路 1 号 1 号院，朝阳区，北京
联系电话：13919186957

(For Hotel b)

2) Take subway:

T3 Terminal

| Take S12 airport subway

Sanyuanqiao (三元桥)

| Take L10 subway

Jiandemen (健德门)

| Go by foot

Hotel

3) Take bus

T3 Terminal

| Take R4 bus

Beitaipingqiaoxi (北太平桥西)

| Take R939 bus

Jianxiangqiaodong (健翔桥东)

| Go by foot

Hotel

Workshop agenda

Time	Speaker	Title
DAY 1 (September 16, 2013)		
07:30-08:00	On desk registration	
08:00-08:30	Opening ceremony welcome, introduction to workshop, introduction to participants Prof. Guodong Cheng, Prof. Congbin Fu Prof. Changqing Song, Dr. Ramasamy Jayakuma Chaired by Prof. Xin Li	
08:30-09:00	Coffee break, group photo	
09:00-11:00	Prof. Huadong Guo	Chinese remote sensing data: Introduction and applications
11:00-13:00	Prof. Toshio Koike	Water cycle data integration and analysis
13:00-14:00	Lunch	
14:00-16:00	Prof. Soroosh Sorooshian	T1: Remote sensing of precipitation and other water cycle components T2: The impact of large scale irrigation and influence on regional climate
16:00-16:20	Coffee break	
16:20-18:20	Prof. Li Jia and Prof. Massimo Menenti	Regional estimation of daily to annual regional evapotranspiration with MODIS data
19:00-21:00	Welcome banquet	
DAY 2 (September 17, 2013)		
08:20-10:20		
10:20-10:30	Coffee break	
10:30-12:30	Prof. Bingfang Wu	CropWatch: Monitoring the food security using remote sensing
12:30-14:00	Lunch	
14:00-16:00	Prof. John Pomeroy	The variable contributing area, depressional storage and runoff generation; determination using LiDAR and hydrological modeling
16:00-16:20	Coffee break	
16:20-18:20	Prof. Dawen Yang	Modeling the eco-hydrological processes in the upper Heihe River for runoff prediction
DAY 3 (September 18, 2013)		
08:20-10:20	Prof. Shakeel Ahmed	Application of geostatistical methods in data collection network design and parameter estimation of underground reservoirs
10:20-10:30	Coffee break	
10:30-12:30	Prof. Kun Yang	Satellite data assimilation for hydrological studies in arid and semiarid regions

12:30-14:00	**Lunch**	
14:00-16:00	**Prof. Xin Li**	**Hydrology remote sensing: Watershed remote sensing experiment on eco-hydrology in the Heihe River Basin**
16:00-16:20	**Coffee break**	
16:20-18:20	**Prof. Qinhuo Liu**	**Regional remote sensing products and the applications in environmental management**
DAY 4 (September 19, 2013)		
08:20-09:20	**Prof. Abdin Salih**	**Development of the International Hydrological Programme**
09:20-10:20	**Prof. Milan Dimkic, and Dr. Milovanovic, Dr. Dejan Dimkic**	**Water management, droughts and climate change in South East Europe**
10:20-10:30	**Coffee break**	
10:30-11:30	**Prof. William Logan**	**Optimal allocation of water resources between countries in the region**
11:30-12:30	**Prof. Ramakar Jha**	**Eco-hydrological analysis of Brahmani river system, India for environmental flow assessment**
12:30-14:00	**Lunch**	
14:00-18:00	**Prof. Qinhuo Liu**	**Hand on training**
DAY 5 (September 20, 2013)		
Whole day	**Asian G-WADI network meeting**	

Registration

1) Registration Fee

The registration fee is free for invited experts

The registration fee is 800 RMB for other participants limited to 50 persons. Pay at conference registration desk.

2) Workshop Language

The workshop language is English.

3) **Registration ：**

Please complete the registration form at http://asian-gwadi.westgis.ac.cn/workshop-2013-bj/, together with

- Your CV in English
- A copy of Passport (for visa application)

The deadline for registration is extended to **20 August 2013**. However, for people need entry visa, please register the workshop at your earliest convenience. The visa documentation procedure may take as long as two-three months.

4) Point of Contact

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