



# AsiaFlux Workshop 2009

## *Integrating Cross-scale Ecosystem Knowledge: Bridges and Barriers*

27-29 October 2009, Sapporo, Japan

<http://www.japanflux.org/asiafluxws2009/>

"Sum, ergo cogito (I am, therefore I think)!" This 'human-in-ecosystem' perspective is a way to think about the relationship between nature and society and about the interfaces between the two. Linking ecological and social systems is a cross-scale problem. In Asia, reaching a serviceable understanding of the sustainability, dynamics, vulnerability and resilience of these complex socio-ecological systems will require a stronger push to advance focused cross-disciplinary scientific research with a clear vision.

AsiaFlux is a science community with a mission to bring Asia's key ecosystems under observation to ensure quality and sustainability of life in Asia. It is the Asian arm of FLUXNET, the worldwide flux research network and one of the potential components of Global Earth Observation System of Systems (GEOSS). Our vision is to serve as the 'science frontier' in carbon, water, and energy cycles in Asia by developing and transferring scientific knowledge characterized by consilience, contextualization, and cultural diversity. By 2011, we aim to (1) provide a report on the Asian carbon (and water) budget with its global perspectives and (2) develop an infrastructure for Asian carbon (and water) tracking system (ACTS).

Our vision is processual, and it is an invitation to re-think global change science. In a beautiful city of Hokkaido in northern Japan, the local organizing committee has prepared an exciting program for the 8th AsiaFlux Workshop on "Integrating Cross-scale Ecosystem Knowledge: Bridges and Barriers." Science is currently going through a painful evolutionary process and a new concept of knowledge is emerging, based on the plurality of perspectives and awareness of complexity, uncertainty and values. So, here we invite you to our new community space in which science meets and interacts with others and where interests, values and decisions are discussed, fought over and perhaps settled. Welcome to the AsiaFlux agora!

Joon Kim, Yu Guirui, and Akira Miyata  
Chair & Vice-Chairs of AsiaFlux

As the chair of the Local Organizing Committee, I am excited to host the 8th AsiaFlux Workshop at Hokkaido University in Sapporo, Japan during 27-29 October 2009. With increasing interests in the global change issues, we scientists are compelled to expand our views to the global biogeochemical context through collaboration with other network of research under the framework of Earth observing system, and offer the right scientific knowledge to society to answer socio-economic questions. In this workshop, we will explore the advantages of collaborations between flux research community and various other research communities specializing particularly in long-term ecological research, remote-sensing, and social science to 1) deepen our knowledge about ecosystems, 2) extend our knowledge to broader regions, and 3) extend the knowledge to the society. For this purpose, we organized several special sessions that feature collaborations with other networks, such as FLUXNET, iLEAPS, ILTER, and Remote sensing fields; and the flagship studies will be presented by invited speakers from these networks.

We also organized a session to share the recent progresses in the flux synthesis studies in Asia under CarboEastAsia program. CarboEastAsia is one of the A3 Foresight Programs that has been implemented to support international collaborations among global change scientists particularly from China, Korea and Japan. CarboEastAsia partnership, through synthesizing measurement, theory, and modeling in quantifying and understanding of carbon fluxes and storages in East Asia to cope with climate change protocols, is a true test bed for accomplishing AsiaFlux's vision to serve as the "Science Frontier" by developing and transferring scientific knowledge in carbon, water, and energy cycles in Asia.

The workshop is co-hosted by CarboEastAsia, and Hokkaido University Global COE Program "Establishment of Center for Integrated Field Environmental Science". This workshop will provide a great

opportunity for scientists, students, policy-makers and the public to better understand the latest scientific achievements in the field of global change issues. We are looking forward to having you in Sapporo, sharing the latest knowledge, and discussing to cope with climate change protocols.

Takashi Hirano  
Chair, AsiaFlux Workshop 2009 Local Organizing Committee

## Date and Venue

- Date: October 27 - 29, 2009
- Venue: Conference Hall, Hokkaido University  
N10 W8, Kita-ku, Sapporo 060-0810, Japan

## Program (tentative)

### Sessions

- **Synthesizing flux studies in Asia (CarboEastAsia)**

In this session, CarboEastAsia member scientists share their recent progresses in synthesis studies of carbon and water fluxes in Asia.

- **Global biogeochemical cycles**

This session focuses on research on biogeochemical cycles conducted in collaboration with biogeochemical study programs such as iLEAPS. The session is open to scientists who are studying biogeochemical cycles linking carbon and water flux.

- **Bridges between ecosystem observation and remote sensing**

This session discusses cutting-edge research techniques and potentials linking flux research, long-term ecological research, and remote sensing research using “Land use change” and “Phenology” as key words. This session is open to scientists who are interested in this research field, and studies related to carbon and water flux are welcome.

- **Barriers in flux measurements**

This session will discuss the problems and their solutions for Open-path flux measurement. Li-Cor, LI-7500 open-path gas analyzer is used worldwide to measure CO<sub>2</sub> flux, and has been the standard tool. However, some reports show difficulties in measuring the real flux with this instrument. This session aims to discuss the possible causes for the troubles and the solutions to them.

- **Interfaces between carbon science and society**

This session also aims to share the recent achievements on regional carbon flux monitoring studies, however, especially emphasizing on developing systems to transfer the scientific knowledge to the society, or to develop socio-economic resolutions to prevent and mitigate the risk of human-induced climate change associated with carbon, water and energy cycles in Asia.

- **Regular session**

We are going to have a regular session too. Many other studies on flux, remote sensing, and ecological studies related to carbon and water cycles are welcome.

## AsiaFlux Activities

AsiaFlux was established in 1999 to develop the foundation of network of scientists (and their institutions) who are working to figure out the idiosyncratic character of carbon flux in Asian region and now it is consisted of 65 tower sites and nearly 300 individual members. The main activities of AsiaFlux are:

- Publishing quarterly Newsletter which provides various topics on our research as well as from other research fields,
- Holding annual workshop,
- Managing mailing list, and
- Providing information through website ([www.asiaflux.net](http://www.asiaflux.net)).

Our interests involve the following fields.

- Flux Measurement and Intercomparison,
- Biogeochemical Processes,
- Modeling and Remote Sensing, and
- Integrated study of above fields.

Members of steering committee have been ingathering on regular basis mostly on the occasions of workshops and other related meetings, to discuss operation policy.

### AsiaFlux Steering Committee members

Chair: Joon Kim (Yonsei University, Korea)

Vice-chair: Guirui Yu (Chinese Academy of Sciences, China)

Akira Miyata (National Institute of Agro-Environmental Studies, Japan)

Members: Samakkee Boonyawat (Kasetsart University, Thailand)

Takashi Hirano (Hokkaido University, Japan)

Yue-Joe Hsia (National Donghwa University, Taiwan)

Hiroshi Koizumi (Waseda University, Japan)

Byonglyol Lee (Korea Meteorological Administration, Korea)

Dongho Lee (Yonsei University, Korea)

Shengong Li (Chinese Academy of Sciences, China)

Yoshikazu Ohtani (Forestry and Forest Research Institute, Japan)

Nobuko Saigusa (National Institute of Environmental Studies, Japan)

Makoto Tani (Kyoto Univeristy, Japan)

Sandeep Tripathi (Indian Council of Forestry Research & Education, India)

Susumu Yamamoto (Okayama Univeristy, Japan)

Guangsheng Zhou (Chinese Academy of Sciences, China)

### AsiaFlux Secretaries

Jaeill Yoo (Yonsei University, Korea)

Yuling Fu (Chinese Academy of Sciences, China)

Akiko Ogawa (National Institute of Environmental Studies, Japan)

## Call for Business Display

AsiaFlux Workshop 2009 will welcome more than 150 people including researchers, students and consultants. Therefore, AsiaFlux Workshop 2009 will be a great opportunity for your company not only to advertise the products of your company in AsiaFlux science community, but also to expand exposure to the researchers who are in the science area of carbon, water and energy balances in terrestrial ecosystem.

We would like to welcome many exhibitors from business enterprises for advertisement in proceedings and poster presentation/showcase products at the exhibit booth. We will appreciate if you agree with the workshop objectives and participate in the workshop.

### Business Display Options

- A. Exhibit booth Company can put the posters and commercial goods in the exhibit booth, which measures 2.2m (W) x 1.3m (D). Any sales are not permitted in the venue.  
Exhibition hours: 27 October 11:00 – 28 October 17:00
- B. Advertisement Company can put a 1-page advertisement (black and white) on the proceedings. The page size is European A4 with 20mm of margin. Non-English languages should be used only in figures.

Option	Exhibit booth	Advertisement	Others	Rate
A	Yes	Yes	Registration fee and printed material for 1 participant are included.	100,000 YEN
B	No	Yes	A printed material is included.	50,000 YEN

Your application should be sent to AsiaFlux Workshop 2009 Secretariat by **June 30, 2009**, and payment instruction will be sent to you by return. Payment will be accepted through wire transfer. We will issue a receipt upon request.

AsiaFlux Workshop 2009 Secretariat:

Akiko Ogawa  
Center for Global Environmental Research  
National Institute for Environmental Studies  
16-2 Onogawa, Tsukuba, Ibaraki 305-8506, JAPAN  
Ph: +81-29-850-2971 Fax:+81-29-858-2645  
e-mail: [workshop2009@asiaflux.net](mailto:workshop2009@asiaflux.net)

## AsiaFlux Workshop 2009 Business Display Application

Company Information:

ORGANIZATION NAME			
ADDRESS			
CITY		STATE	
COUNTRY			
CONTACT NAME		TITLE	
PHONE		FAX	
E-MAIL		URL	

Please choose one of the following options (see details in previous page)

- A 100,000 YEN - for an exhibit booth + 1-page B/W advertisement on proceedings
- B 50,000 YEN - for 1-page B/W advertisement on proceedings

Remark:

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Please send this application form via Fax or e-mail to AsiaFlux Workshop 2009 Secretariat office at the following address:

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16-2 Onogawa, Tsukuba, Ibaraki 305-8506, JAPAN  
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