

Land-Atmosphere Interaction Workshop on Flux Data and Model Integration and 5th USCCC Annual Workshop

Beijing (China), 13 September 2008

Second Circular

Goals

The globe is a complex system with multiple processes cohesively linked and affected each other. Changes in one process can have feedback in temporal scales of minutes to hundreds of years and at a spatial scale of cell to globe. Land–atmosphere interaction has a vital role in regulating the functions of the earth system by transferring energy, momentum, and mass. Field data from eddy covariance towers provide experimentalists and modelers with unprecedented opportunities to relate mass and energy flux variability directly to climate variability; and the expanding ancillary database provides critical data on ecosystem structure and function to further explain observed fluxes. This workshop will be organized to explore some of the issues that arise when using flux data and integrated models of land-atmosphere interaction, and review the progress in better characterizing carbon and water cycles of the USCCC.

Sponsors

The workshop will be organized and sponsored by the USCCC, the National Natural Science Funds for Distinguished Young Scholar of China (40625015), Special fund project for climate change of China Meteorological Administration (Effects of climate change on forest, grassland and wetland ecosystems and the adaptative strategy, CCSF2008-1), the Global Change and Terrestrial Ecosystems' Working Group, Chinese National Committee of International Geosphere – Biosphere Programme (GCTE working group, CNC-IGBP).

Venue

The workshop will be held in conference room (the second floor), Plant Ecological Research Center (Ecological building) at the Institute of Botany, the Chinese Academy of Sciences, located at 20 Nanxincun, Xianshang, Haidian District, Beijing, P. R. China. <http://www.ibcas.ac.cn>.

Agenda

- 8:00 – 9:00 Breakfast – All participants at the restaurant, Institute of Botany
- 9:00 – 12:30 9:00 - 9:40 **Welcome & Introduction**, Prof. Guangsheng Zhou
- 9:05 - 9:15 Welcome speech, Director Keping Ma
- 9:15 - 9:25 Welcome speech, Co-Chair of USCCC, Prof. Xinguo Han
- 9:25 - 9:40 USCCC and Workshop Goals, Prof. Jiquan Chen
- 9:40 -12:30 **Report Session**, Prof. Xinguo Han
- 9:40 -10:05 **Lingen Bian**, Comparison of the flux parameterization schemes on the surface layer covered with the fast growth crop
- 10:05 -10:30 **Yuling Fu, Guirui Yu**, Ecosystem–atmosphere carbon and water exchange derived from ChinaFLUX network observation
- 10:30 -10:45 **Coffee Break**
- 10:45 -11:10 **Yao Huang**, Effects of marshland conversion to cropland on carbon flux and water exchange: A four-year observation in northeastern China
- 11:10 -11:35 **Dexin Guan**, Comparison of methods for estimating evapotranspiration rate of dry forest canopy: eddy covariance, Bowen ratio energy balance and Penman-Monteith equation
- 11:35 -12:00 **Ma Zhuguo**, Integrative study on coordinated observation in arid and semiarid region of China
- 12:00 -12:25 **Guangsheng Zhou**, Simulating water vapor, sensible heat and carbon dioxide fluxes over typical terrestrial ecosystems in northeast China
- 12:30 – 13:30 Lunch Buffet

- 13:30 – 17:00 13:30 -15:25 **Report Session**, Prof. Jiquan Chen
- 13:30 -14:10 **Asko Noormets**, Data quality assurance
- Update of US flux sites – temperate oak forest in Ohio and two loblolly pine plantations in lower coastal plain, North Carolina
- 14:10 -14:35 **Ge Sun**, A cross-site comparison on ecosystem evapotranspiration and water balances at 10 USCCC sites: implications of management and climate change
- 14:35 -15:00 **Yaner Yan**, Assessing the carbon and energy balance in an estuarine wetland: past, present and future
- 15:00 -15:25 **Li Zhou**, Annual and seasonal variability of evapotranspiration and its controls over a reed marsh (*Phragmites australis*) in Northeast China
- 15:25 -15:45 **Coffee Break**
- 15:45 -17:00 **Report Session**, Prof. Ge Sun
- 15:45 -16:10 **Yijun Li**, Environmental controls on water and heat fluxes over a rainfed maize agricultural ecosystem
- 16:10 -16:35 **Ping Zhang**, Effects of cultivation and clipping on photosynthesis of steppe ecosystems in Inner Mongolia, China
- 16:35 -17:00 **Yunlong Wang**, Interannual variability in net ecosystem CO₂ exchange and environmental control on *S. krylovii* steppe and maize cropland in northern China
- 17:00 – 18:00 **PIs: Meeting in 2009, Data Sharing, Synthesis, and the Future Plan**, Prof. Jiquan Chen
- 18:00-20:00 **Dinner** – All participants at the restaurant, Institute of Botany

Oral presentation

Please submit a title of oral presentation to Guangsheng ZHOU (gszhou@ibcas.ac.cn or zhougs@public2.bta.net.cn) by September 5nd 2008. We strongly encourage the PIs of USCCC and the member of GCTE working group, CNC-IGBP to give the oral presentations.

Abstract

Please submit an extended abstract (no more than 2 sides of A4, 12 point font size single spaced) showing how your current research interests relate to land – atmosphere interaction. Return to Guangsheng ZHOU (gszhou@ibcas.ac.cn or zhougs@public2.bta.net.cn) by September 5nd 2008.

Hotel reservation

We strongly encourage the participants by yourself to contact the hotels listed as follows, or you could ask for the hotel reservation through the workshop organization(gszhou@ibcas.ac.cn).

Hotel of Institute of Botany, 120RMB/day, Tel. 010-62836180/6188 (植物所招待所有 4 间房, 房价: 120 元/天有 1 间; 160 元/天有 3 间。订房电话是: 010-62836180/6188)

Xiangshan Restrauant, 180RMB/day or 388RMB/Suite, Tel.010-62592738 (香山酒楼客房可住多人, 房价: 单间或标准间是 180 元, 还有 2 间套房 388 元/天。订房电话: 010-62592738)

Xiangshan Jinyuan Hotel, 450RMB/day or 600RMB /day, Tel. 13911776482 (香山金源饭店房价: 散客房源 450 元/天和 600 元/天, 联系电话: 13911776482 王东媛).

REGISTRATION

Fill out in block letters, check the options indicated and send to: gszhou@ibcas.ac.cn

To be returned not later than September 5th, 2008

1. PERSONAL INFORMATION:

FIRST NAME.....FAMILY NAME.....
ADDRESS.....
POST
CODE.....CITY.....COUNTRY.....
TEL.....FAX.....MOBILE.....
E-MAIL.....
How many team members?.....

2. PRESEBTATION: If your team would like to give a presentation in the workshop, please provide:

Title.....
Speaker.....

3. GENERAL INFORMATION

All participates will be responsible for their travel and room cost while the food will be provided by the project and CNC-GCTE working group.