

2nd Hydrology delivers Earth System Science to Society

Joint meeting for **GSWP/GLASS AsiaFlux/FLUXNET LandFlux-EVAL**

22nd – 25th June 2010, Tokyo, Japan

Purposes and Objectives

During the 1st HESSS at 2007, we had attempted to ascertain the gaps between the needs of society and the services of hydrology community. Estimation and reduction of uncertainty in simulations were identified as key leverage points along with an appropriate use of observational datasets in validation and data assimilation. The 2nd HESSS international conference brings three unique communities together to bridge such gaps with a shared vision of a sustainable and desirable world. Our objective is to establish practical protocols and frameworks to promote more effective collaborations among the research communities of hydrological modeling, field observations, remote sensing in the context of sustainability science. To highlight the core issues, values and implications, all the sessions consist of stimulating keynote speeches and panel discussions by leading scientists and enthusiastic young researchers. As a true test bed for community level collaboration, new frameworks such as the Global Soil Wetness Project phase 3 (GSWP3) and HydroAsia will be launched as the outcome of the conference. We invite you to join us, and contribute oral or poster presentations and discussions.

Sessions

Symposium Sessions

Past, Present, and Future of AsiaFlux, LandFlux-EVAL, and GSWP

*Chair

S1. AsiaFlux/FLUXNET

*[Joon Kim](#) (Yonsei Univ., Korea), [Stuart Chapin](#) (Univ. of Alaska, USA)

S2. LandFlux-EVAL

*[Sonia Seneviratne](#) (ETH Zurich, Switzerland), [Ray Leuning](#) (CSIRO, Australia)

S3. GSWP/GLASS

*[Paul Dirmeyer](#) (COLA, USA), [Hyungjun Kim](#) (Univ. of Tokyo, Japan)

Challenge of Hydrology to Answer Social and Scientific Needs

S4. Hydrology toward Changing Climate

[Petra Doell](#) (Goethe Univ., Germany), [Naota Hanasaki](#) (NIES, Japan), *[Murugesu Sivapalan](#) (UIUC, USA)

S5. Biogeochemical Feedbacks and Hydrologic Cycle

[Guiling Wang](#) (Univ. of Connecticut, USA), [Akihiko Itoh](#) (NIES, Japan), *[\[Philippe Ciais \(IPSL, France\)\]](#)

Recent Achievements of Remote Sensing and Data Assimilation

S6. Innovations in Remote Sensing

[Shinta Seto](#) (Univ. of Tokyo, Japan), [Shin-Chan Han](#) (NASA/GSFC, USA), *[Eric Wood](#) (Princeton Univ., USA)

S7. Recent Achievements in Data Assimilation

[Rolf Reichle](#) (NASA/GSFC, USA), [Gianpaolo Balsamo](#) (ECMWF, UK), *[Toshio Koike](#) (Univ. of Tokyo, Japan)

Communication with Different Research Communities and Synthesis

S8. Liaison between Different Fields of Researches

[Marek Zreda](#) (Univ. of Arizona, USA), *[Jing-Ming Chen](#) (Univ. of Toronto, Canada), [Hans Peter Schmid](#) (IMK-IFU, Germany)

S9. Report, General Discussion and Closing

*[Taikan Oki](#) (Univ. of Tokyo, Japan), [\[Peter J. van Oevelen \(GEWEX, USA\) \(Rapporteur\)\]](#)

GSWP/GLASS Sessions

G1. Advancement in Hydrologic Modeling

[James Famiglietti (UC Irvine, USA)], Eric Wood (Princeton Univ., USA)

G2. Information Infrastructure and Coordinated Observations for Global Hydrology

Petra Doell (Goethe Univ., Germany), Paul Houser (George Mason Univ., USA)

G3. Global Off-line Land Simulations and Water Resource/Quality Assessment

[Fulco Ludwig (Wageningen Univ. & Res. Centre, Netherland)]

G4. Land/Atmosphere Interaction

Zhichang Guo (COLA, USA)

G5. Global Soil Wetness Project: Phase 3

Open Discussion (*Discussant: Paul Dirmeyer*)

G6. Global Soil Wetness Project: Phase 3

Open Discussion (*Discussant: Taikan Oki*)

AsiaFlux/FLUXNET Sessions

A1. HydroAsia

Jing-Ming Chen (Univ. of Toronto, Canada), Weimin Ju (Nanjing Univ., China), Jinkyu Hong (NIMS, Korea), Kazuhito Ichii (Fukushima Univ., Japan)

A2. HydroAsia

Jun Asanuma (Univ. of Tsukuba, Japan), Sin-Kyu Kang (Kangwon Nat. Univ.), Shinjiro Kanae (Tokyo Inst. of Tech., Japan)

A3. CarboEastAsia

Naishen Liang (NIES, Japan), Guirui Yu (IGSNRR/CAS, China), Takashi Hirano (Hokkaido Univ., Japan), Joon Kim (Yonsei Univ., Korea), Nobuko Saigusa (NIES, Japan)

A4. CarboEastAsia

Hiroyuki Muraoka (Gifu Univ., Japan), Stuart Chapin (Univ. of Alaska, USA), Sheng-Gong Li/Shaoqiang Wang (IGSNRR/CAS, China)

A5. Assessment of Asian Carbon/Water Budget

Hans Peter Schmid (IMK-IFU, Germany), Naishen Liang (NIES, Japan), Hyojung Kwon (Seoul Nat. Univ, Korea), Akira Miyata (NIAES, Japan)

A6. Assessment of Asian Carbon/Water Budget

Nobuko Saigusa (NIES, Japan), Thomas Lauvaux (PSU, USA), Akihiko Itoh (NIES, Japan)
Open discussion (*Discussant: Jing-Ming Chen*)

LandFlux-EVAL Sessions

L1. LandFlux-EVAL Results and Perspectives

Eric Wood (Princeton Univ., USA), Marcus Reichstein (Max Planck Inst., Germany)

L2. Current Challenges in the Evaluation of Evapotranspiration Datasets

Carlos Jimenez (Observatoire de Paris, France), Brigitte Mueller (ETH Zurich, Switzerland), Matthew McCabe (Univ. of New South Wales, Australia)

Please refer to the HESSS2 conference web page (<http://hydro.iis.u-tokyo.ac.jp/HESSS2>) for the most recent update. Some of keynote speakers are not fixed as indicated as gray color, and the programs of each session can be slightly change by some reasons.

Agenda

| DAY 1 | | | | 06.22 TUE |
|---------------|---|---------------------------|------------------------|---------------------------------|
| 08:30 – 09:30 | | | | Registration |
| 09:30 – 10:00 | | | | S0. Opening |
| 10:00 – 11:00 | S1. AsiaFlux/FLUXNET | | | |
| 11:00 – 12:00 | S2. LandFlux-EVAL | | | |
| 12:00 – 13:00 | S3. GSWP/GLASS | | | |
| 13:00 – 14:30 | | | | Lunch |
| 14:30 – 16:00 | GSWP/GLASS 1 | AsiaFlux/FLUXNET 1 | | |
| 16:00 – 16:30 | | | | Coffee break |
| 16:30 – 18:00 | GSWP/GLASS 2 | AsiaFlux/FLUXNET 2 | | |
| 18:00 – | | | | Ice breaker |
| DAY 2 | | | | 06.23 WED |
| 09:00 – 10:30 | S4. Hydrology toward Changing Climate | | | |
| 10:30 – 11:00 | | | | Poster core-time / Coffee break |
| 11:00 – 12:30 | S5. Biogeochemical Feedbacks and Hydrologic Cycles | | | |
| 12:30 – 14:00 | | | | Lunch |
| 14:00 – 15:30 | GSWP/GLASS 3 | AsiaFlux/FLUXNET 3 | LandFlux-EVAL 1 | |
| 15:30 – 16:00 | | | | Poster core-time / Coffee break |
| 16:00 – 17:30 | GSWP/GLASS 4 | AsiaFlux/FLUXNET 4 | LandFlux-EVAL 2 | |
| DAY 3 | | | | 06.24 THU |
| 09:00 – 10:30 | S6. Innovations in Remote Sensing | | | |
| 10:30 – 11:00 | | | | Poster core-time / Coffee break |
| 11:00 – 12:30 | S7. Recent Achievements in Data Assimilation | | | |
| 12:30 – 14:00 | | | | Lunch |
| 14:00 – 15:30 | GSWP/GLASS 5 | AsiaFlux/FLUXNET 5 | | |
| 15:30 – 16:00 | | | | Poster core-time / Coffee break |
| 16:00 – 17:30 | GSWP/GLASS 6 | AsiaFlux/FLUXNET 6 | | |
| 18:00 – | | | | Banquet |
| DAY 4 | | | | 06.25 FRI |
| 09:00 – 10:30 | S8. Liaison between Different Fields of Researches | | | |
| 10:30 – 11:00 | | | | Coffee break |
| 11:00 – 12:30 | S9. Report, General Discussion and Closing | | | |

The symposium sessions have two (S1 – S3) or three (S4 – S8) consecutive keynote presentations and 20 min (S1 – S3) or 30 min (S4 – S8) open discussion. Please refer to the conference web page (<http://hydro.iis.u-tokyo.ac.jp/HESSS2>) for the detail of conference sessions (G1 – G6, A1 – A6, L1 – L2).

Poster display time is from 08:30 to 16:00 in Day 2 and Day 3. The authors will be noticed for the attendance time to be available at their poster display.

Registration and Call for Papers

Regular and student registration fee are 20,000 JPY and 15,000 JPY, respectively.

Early registration

10th April – 31st May

We encourage submissions of contributed abstracts in various scientific issues related with broad field of researches such as hydro-meteorology and climatology, boundary layer meteorology, remote sensing, and water resource and quality for oral and/or poster presentations. The contributed abstracts will be assigned into appropriate subject as either oral or poster presentation through evaluation processes. The length of abstract is recommended to be 500 – 1000 words.

Abstract submission

13th April – 13th May

We plan to publish a special issue of an on-line journal within 2011, and the organizing committee and some of invited speakers will lead the processes.

Venue and Access

Venue

Building A, Institute of Industrial Science, The University of Tokyo Komaba Campus, 4-6-1 Komaba, Meguro-ku, Tokyo, 153-8505, Japan

Access

Tokyo international airport (Narita) to Shinjuku or Shibuya station

1hr 30min – 2hr (approx. 3000 JPY)

Shinjuku or Shibuya station to the venue

Approximately, 30min including walking

Please refer to the conference web page (<http://hydro.iis.u-tokyo.ac.jp/HESSS2>) for information in detail (e.g. maps, fare/time table of transportations, weather/climate, accommodation, and so on).

Organizing Committee

GSWP/GLASS

| | |
|-------------------------|--|
| Taikan Oki | The University of Tokyo, Japan (Chair) |
| Paul Dirmeyer | COLA, USA |
| Bart van den Hurk | KNMI, Netherlands |
| Christa D. Peter-Lidard | NASA/GSFC, USA |
| Hyungjun Kim | The University of Tokyo, Japan (Secretariat) |

AsiaFlux/FLUXNET

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|--------------|--------------------------|
| Joon Kim | Yonsei University, Korea |
| Akira Miyata | NIAES, Japan |
| Guirui Yu | IGSNRR/CAS, China |

LandFlux-EVAL

| | |
|-------------------|--|
| Sonia Seneviratne | ETH Zurich, Switzerland |
| Carlos Jimenez | Observatoire de Paris, France |
| Bill Rossow | City College of New York, USA |
| Matthew McCabe | University of New South Wales, Australia |
| Chris Kummerow | Colorado State University, USA |
| Eric Wood | Princeton University, USA |

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