

Kazuyoshi Souma

International Pacific Research Center,
School of Ocean and Earth Science and Technology,
University of Hawaii

EDUCATION

Dr. Eng. in March 2007

Department of Urban and Environment Engineering, Kyoto University, Kyoto, Japan

- Estimation of land surface condition and investigation of the effect of soil moisture on a heat thunderstorm in Japan

M. Eng., 2004, Kyoto University, Kyoto, Japan

B. Eng., 2002, Kyoto University, Kyoto, Japan

ACADEMIC AND RELATED EXPERIENCE

Postdoctoral Fellow, International Pacific Research Center, SOEST, University of Hawaii, Honolulu, Hawaii, August 2007 – present

Investigation of the effect of large to meso-Scale land-atmosphere interaction on Asian monsoon and its modeling

Postdoctoral Fellow, Kyoto University Pioneering Research Unit for Next Generation, Kyoto University, Kyoto, Japan, April 2007 – July 2007

Improvement of cloud resolving land-atmosphere coupled model

Research Assistant (Part time), Disaster Prevention Research Institute, Kyoto University, Jul. 2006 to present and Jul. 2005 – May. 2006

Estimation of land surface condition and investigation of the effect of soil moisture on a heat thunderstorm in Japan

Teaching Assistant (Part time), Graduate School of Engineering, Kyoto University, Apr. 2004 – Jul. 2004 and Oct. 2002 – Jan. 2003

Assisted Professor in preparing teaching materials

Assisted students in hydraulic experiments

RESEARCH INTERESTS

Large-Scale and Meso-Scale land-atmosphere interaction

Asian-Australian monsoon system

Hydrometeorological modeling

Meso-scale meteorology

PUBLICATIONS

- Kazuyoshi Souma, Yuqing Wang: Improved simulation of the East-Asian Summer Monsoon Rainfall with the Satellite-Derived Snow Water Equivalent Data, Monthly Weather Review, in press.
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, Shuichi Ikebuchi, and Kaoru Takara: Effect of the LDAS Derived Realistic Distribution of Soil Moisture on a Summertime Heat Thunderstorm Prediction in Japan, Proceedings CD-ROM of the Water Down Under 2008, J2.3, 2008 (CD-ROM).
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: The effect of soil moisture on convective precipitation over the mountainous region in Japan during the summer season, Annual Journal of Hydraulic Engineering, Japan Society of Civil Engineers, 50, 87 (CD-ROM), 2006, (in Japanese).
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: Coupling a mosaic land surface scheme (SiBUC) with a nonhydrostatic atmospheric model (ARPS), Proceedings of 85th American Meteorological Society Annual Meetings, P3.18 (CD-ROM), 2005.
- Kenji Tanaka, Kazuyoshi Souma, Eiichi Nakakita, and Shuichi Ikebuchi: The Importance of Surface Heating in Short-term Numerical Weather Prediction, Annuals of Disaster Prevention Research Institute, Kyoto University, No.48 C, pp.97-109, 2005.

- Qoosaku Moteki, Yotaro Ito, Kazuaki Yorozu, Kazuyoshi Souma, Atsushi Sakakibara, Kazuhisa Tsuboki, Teruyuki Kato, Kenji Tanaka, and Shuichi Ikebuchi : Estimation for Effects of Existence of Urban on Development of Cumulonimbus Clouds Using Atmosphere-Land Coupled Model of CReSiBUC, Annuals of Disaster Prevention Research Institute, Kyoto University, No.48 C, pp.197-208, 2005.
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: The effect of land cover and local circulation on convective precipitation around the Lake Biwa, Annual Journal of Hydraulic Engineering, Japan Society of Civil Engineers, 49, pp.259–264, 2005, (in Japanese).
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: Coupling and advanced land surface process model with a nonhydrostatic atmospheric model, Annual Journal of Hydraulic Engineering, Japan Society of Civil Engineers, 48, pp.127–132, 2004, (in Japanese).

PRESENTATIONS

- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, Shuichi Ikebuchi, and Kaoru Takara: Effect of the LDAS Derived Realistic Distribution of Soil Moisture on a Summertime Heat Thunderstorm Prediction in Japan, Water Down Under 2008, J2.3, Adelaide, April 2008.
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: The effect of soil moisture distribution estimated by using a land surface model on heat thunderstorm in summer time in Japan, International Symposium on “Hydrology delivering Earth System Science to Society”, Tsukuba, February 2007.
- Kazuyoshi Souma, Kenji Tanaka, and Shuichi Ikebuchi: Estimation of the Land Surface State in Japan Using Meteorological Data and Land Surface Model, Asia Oceania Geosciences Society 3rd Annual Meeting 2006, 59-HS-A1245, Singapore, July 2006.
- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi: The effect of land surface condition on convective precipitation over the mountainous region in Japan during the

summer season, Asia Oceania Geosciences Society 2nd Annual Meeting 2005, 58-OA-A1360, Singapore, June 2005.

- Kazuyoshi Souma, Kenji Tanaka, Eiichi Nakakita, and Shuichi Ikebuchi : Coupling a mosaic land surface scheme (SiBUC) with a nonhydrostatic atmospheric model (ARPS), 19th Conference on Hydrology, 85th American Meteorological Society Annual Meeting, P3.18, San Diego, January 2005.

COMPUTERS SKILLS

Fortran, csh, HTML, LATEX, C++, C, sh, and perl

LANGUAGES

Japanese (mother tongue)

English (read, speak and write)