

国際誌 [International peer-reviewed journal]

1. Kochi K., Asaeda T., Chibana T., Fujino T. "Physical factors affecting the distribution of leaf litter patches in streams: comparison of green and senescent leaves in a step-pool streambed", *Hydrobiologia*, Vol.628, No.1, pp.191-201, 2009.
2. Tamura, T., Taniguchi, K., Koike, T. (2010), The mechanism of upper tropospheric warming around the Tibetan Plateau at the onset phase of the Asian summer monsoon, *Journal of Geophysical Research-Atmosphere*, 115, D02106, doi:10.1029/2008JD011678.
3. Saavedra, O. and Koike, T. (in press, 2010a): Towards Global River Discharge using a Distributed Hydrological Model. *Investigación & Métodos*, Vol. Journal of the Bolivian Private University, accepted in December 2009.
4. Saavedra, O., Koike, T., Yang, D., Nyunt, C., T., Khanh, D. V. & Chau, L.C. (2009b) Flood simulation using different sources of rainfall in the Huong River, Vietnam. *Hydrological Sciences Journal*, 54(5), pp. 909-917.
5. Saavedra, O., Koike, T., Yang, K. & Yang, D. (in press, 2010c): Optimal Dam Operation during Flood Season using a Distributed Hydrological Model and a Heuristic Algorithm, *Journal of Hydrological Engineering*, ASCE, manuscript accepted in October 2009.
6. Qihong Tang, Huiling Gao, Hui Lu, D. P. Lettenmaier: Remote sensing: hydrology. *Progress in Physical Geography*, 33(4) 490-509. doi:10.1177/0309133309346650, 2009.
7. Tsutsui, H. and Koike, T.: Estimation And Discussion Of Long-term Snow Depth Based On SSM/I Data, *Journal of Hydrosience and Hydraulic Engineering*, Vol.27, No.1, pp.49~60, May, 2009.
8. Wang, L., Koike, T., Yang, K., Jackson, T., Bindlish, R., Yang, D. (2009), Development of a distributed biosphere hydrological model and its evaluation with the Southern Great Plains Experiments (SGP97 and SGP99), *Journal of Geophysical Research-Atmospheres*, 114, D08107, doi:10.1029/2008JD010800.
9. Wang, L., T. Koike, K. Yang, and P. Yeh (2009), Assessment of a distributed biosphere hydrological model against streamflows and MODIS land surface temperature in the upper Tone River Basin, *Journal of Hydrology*, 377, 21-34.
10. Wang, L., T. Koike, D. Yang, and K. Yang (2009), Improving the hydrology of the Simple Biosphere Model 2 and its evaluation within the framework of a distributed hydrological model, *Hydrological Sciences Journal*, 54(6), 989-1006.
11. Wang, L., C. T. Nyunt, T. Koike, O. Saavedra, L. C. Nguyen, T. V. Sap (2010), Development of an integrated modeling system for improved multi-objective reservoir operation, *Frontiers of Architecture and Civil Engineering in China*, 4(1), 47-55.
12. Wang, L., T. Koike, K. Yang, R. Jin, and H. Li (2010), Frozen soil parameterization in a distributed biosphere hydrological model, *Hydrology and Earth System Sciences*, 14, 557-571.
13. Wang, L., Z. Wang, T. Koike, H. Yin, D. Yang, S. He (2010), The assessment of surface water resources for the semi-arid Yongding River Basin from 1956 to 2000 and the impact of land use change. *Hydrological Processes*, 24, 1123-1132.
14. Taniguchi, K., D. Rajan and T. Koike, Effect of the variation in the lower tropospheric temperature on the wind onset of the Indian summer monsoon, *Meteorol. Atmos. Phys.*, Vol.106 (1-2), pp.75-94, doi:10.1007/s00703-009-0051-6, 2010

#### 国内誌[Domestic peer-reviewed Journal]

1. 三國谷隆伸, 知花武佳, 丹波聖泰: 山地河川合流部における河床構造の分析, 河川技術に関する論文集 vol.15, pp237-242, 2009.
2. 知花武佳, 山下貴美子, 工藤美紀男, 柳澤亘: 横断構造物が河川地形に及ぼす影響とそこに見られる治水・環境両面の特性, 河川技術に関する論文集 vol.15, pp231-236, 2009.
3. Patricia Ann Jaranilla-Sanchez, Lei Wang, Toshio Koike, ENSO influence on the 1982-2000 hydrological properties of the Pantabangan-Carranglan Watershed, Philippines, 水工学論文集第 54 巻, 19-24, March 2010.
4. Mohamed RASMY, Toshio KOIKE, Hui Lu, Xiangde Xu, Souhail BOUSSETTA, Xin Li (2010), DEVELOPMENT OF A SATELLITE BASED SEQUENTIAL LAND DATA ASSIMILATION SYSTEM COUPLED WITH A REGIONAL-SCALE ATMOSPHERIC MODEL, 水工学論文集第 54 巻, pp49-54, March 2010.
5. Maheswor Shrestha, Lei Wang, Toshio Koike, Investigating the applicability of WEB-DHM to the Himalayan river basin of Nepal, 水工学論文集第 54 巻, 55-60, March 2010.
6. Hui Lu, Toshio Koike, Kun Yang, Xin Li, Mohamed Rasmy, Hiroyuki Tsutsui, Souhail Boussetta and Katsunori Tamagawa, “Simulating of land surface soil moisture and energy flux in northern Africa using a land data assimilation system and UKMO output,” 水工学論文集第 54 巻, pp. 61-66, March 2010.
7. Oliver C. SAAVEDRA V., Toshio KOIKE, Lei WANG, L.: Multi-Reservoir Operation Using a Distributed Biosphere Hydrological Model, 水工学論文集第 54 巻, pp.103-108, March 2010.
8. 谷口健司・荒木 裕・Cyrus Raza MIRZA・小池俊雄: 雲微物理衛星データ同化手法における海面水温・海上風速及び雲頂高度情報の影響, 水工学論文集第 54 巻, pp361-366, March 2010.
9. 玉川 勝徳, 小池 俊雄, Hui LU, Kun YANG, Xin LI, Huizhi LIU: 陸面データ同化手法を用いた土壌水分推定に影響を及ぼす地表面不均一性に関する検討, 水工学論文集第 54 巻, pp.379-384, March 2010.
10. 筒井浩行・小池俊雄・上野健一・XiangDe XU・Shihong WU・Rui JIN・Hui LU: マイクロ波放射伝達モデルへの凍結土壌層の導入と積雪衛星アルゴリズムの改良, 水工学論文集第 54 巻, pp.415-420, March 2010.

#### 国際学会,ワークショップ,シンポジウム発表 [International Conference, Workshop, Symposium]

1. Takeyoshi CHIBANA“Integration of Flood Control and Environmental Preservation in Urban River”, International Workshop on Sustainable City Region, pp151-156, 2009.
2. Hiroaki FUJIMORI, Takeyoshi CHIBANA“Examination of Maintaining Method of the Gravel Bed River Channel” International Workshop on Sustainable City Region, pp234-239, 2009.
3. Toshio Koike, “Introduction to Hydro meteorological-Related Disaster and Water Resources Management”, 第 4 回 GEOSSAP シンポジウム, Bali, Indonesia, 11 March 2010.
4. Toshio Koike, 第 6 回 GEOSS/AWCI-ICG 国際会議, Bali, Indonesia, Bali, 13 March 2010.

5. K. Tamagawa, E. Ikoma and H. Kinutani, T. Ohta, M. Kitsuregawa, T. Koike: Short training Course - Data quality check and meta data registration -, 6th GEOSS Asian Water Cycle Initiative International Coordination Group Meeting, Bali, 13 March 2010.
6. Hiroyuki TSUTSUI, Toshio KOIKE, XiangDe XU, Shihong WU, Xin LI and Rui JIN and Hui LU: Application of the land data assimilation system for a frozen soil in the permafrost region of Tibetan Plateau, The Inter-national Conference on Land Surface Radiation and Energy Budgets, Proceedings, pp.9, March, 2009.
7. Tsujimoto K. and Monichoth S.I., Progress and future perspective through the SAFE activities in Cambodia, the 16th Asia-Pacific Regional Space Agency Forum (APRSAP), Bangkok, Thailand., January., 2010.
8. Wang, L., T. Koike, K. Yang, Modelling the water and energy cycles in the upper Tone River Basin, Japan, *2009 AGU Fall Meeting*, San Francisco, December 2009.
9. Tamura, T., M. Yasukawa, K. Taniguchi., T. KOIKE: Mechanism of upper tropospheric warming over the Tibetan Plateau at the onset phase of the Asian summer monsoon, AGU Fall meeting, San Francisco, December 2009.
10. Saravuth L., Monichoth S.I., and Tsujimoto K., Water cycle and agricultural activities during the post-monsoon season in the western Cambodia, the 5th International Coordination Group Meeting GEOSS Asian Water Cycle Initiative (AWCI), Tokyo, Japan, December, 2009.
11. Oliver C. Saavedra V., Toshio Koike & E. Hugo Berbery: On the use of MODIS and TRMM products to simulate hydrological processes in the La Plata Basin. Accepted Poster, H11E-0856, AGU Fall Meeting, San Francisco, 14 December, 2009.
12. K. Tamagawa, E. Ikoma and H. Kinutani, T. Ohta, M. Kitsuregawa, T. Koike: Data Upload, Quality Control and Meta-Data Registration System, 6th Asian Monsoon Year(AMY) meeting, Kunming, 1 December 2009.
13. Toshio Koike;, “WA-08-01e:CEOP” , GEO Water Cycle Data Integration Workshop, Frascati, Italy, 2009 年 November 2009.
14. Toshio Koike;, “ Modeling the Global Water Cycle, status and challenges ” , The 6<sup>th</sup> GEOPlenary, Washington DC, U.S.A, November 2009.
15. Hui LU, Toshio KOIKE, Kun YANG, Xiangde XU, Xin LI, Hiroyuki TSUTSUI, et al.: SIMULATING SURFACE ENERGY FLUX AND SOIL MOISTURE AT THE WENJIANG PBL SITE USING THE LAND DATA ASSIMILATION SYSTEM OF THE UNIVERSITY OF TOKYO , The fourth Japan-China-Korea Joint Conference on Meteorology, Tsukuba, November 2009.
16. Taniguchi, K., T. Tamura, T. Koike, K. Ueno, X. Xu: The increase in the atmospheric temperature over the Tibetan Plateau in early spring and pre-monsoon season, Forth Japan-China-Korea Joint Conference on Meteorology, Tsukuba, November 2009.
17. Wang, L., T. Koike, K. Yang, Analyses of the water and energy cycles in the upper Tone River Basin with the aids of a distributed biosphere hydrological model (WEB-DHM) and MODIS land surface temperature, *The fourth Japan-China-Korea Joint Conference on Meteorology*, Tsukuba, November 2009.
18. Oliver Saavedra & Toshio Koike: Decision support in water resources management using remote sensing data and quantitative precipitation forecast, Oral, Workshop on Using Advanced Geographical Information System (GIS) and Satellite Information for Development in Asia, on 12 October, Manila, The Philippines, 2009.
19. Tsujimoto K. and Koike T., Land-Lake-Atmosphere Interaction in the Tonle Sap Lake Area and Its Effects on the Post-Monsoon Rainfall in the Western Cambodia, 6th Annual Meeting of the Asia Oceania Geosciences Society (AOGS), Singapore, August, 2009.

20. Hui Lu, Toshio Koike, Kun Yang, Xin Li, Xiangde Xu, Hiroyuki Tsutsui, Katsunori Tamagawa: Observing and Simulating Land Surface Energy and Water Fluxes Over The Tibetan Plateau, GEWEX 6<sup>th</sup> International Scientific Conference on the Global Energy and Water Cycle, 24-28 August, 2009, Melbourne, Australia.
21. Mirza, C. R., Toshio K., Kun Y., and Tobias G., The application of 1D-Var Cloud Microphysics Data Assimilation System (CMDAS) for improving the cloud parameters retrievals over the Medjerda Basin by AMSR-E Satellite Data, 6<sup>th</sup> Global Energy and Water Cycle and the 2<sup>nd</sup> Integrated Land Ecosystem-Atmosphere Study (iLEAPS) Science Conference, Melbourne, Australia, August 2009.
22. Wang, L. and T. Koike, Fractional vegetation coverage parameterization in distributed biosphere hydrological modeling, *The 6<sup>th</sup> International Scientific Conference on the Global Energy and Water Cycle and the 2<sup>nd</sup> Integrated Land Ecosystem-Atmosphere Processes Study (iLEAPS) Science Conference*, Proceedings, Vol. 2, pp. 607-608, Melbourne, August 2009.
23. KATSUNORI TAMAGAWA, Toshio KOIKE, Lu HUI, Kun YANG, Shigenori HAGINOYA, Hirohiko ISHIKAWA, XiangDe XU, Shihong WU: Estimation of the soil moisture and land surface flux at the Tibet Gaize station, by using LDAS-UT, Second Integrated Land Ecosystem-Atmosphere Study (iLEAPS) Science Conference, Melbourne, 24 August 2009.
24. Oliver Saavedra & Toshio Koike: Optimal Reservoir Operation Using Meso-scale Quantitative Precipitation Forecast, Poster, 6th International Scientific Conference on the Global Energy and Water Cycle, GEWEX, held on 24-28 August, Melbourne, Australia, 2009.
25. Tsujimoto K. and Koike T., Mechanisms and processes for the generation of early-morning clouds over the Tonle Sap Lake in Cambodia, , Proceedings, 6th International Scientific Conference on the Global Energy and Water Cycle (GEWEX), Melbourne, August, 2009.
26. Toshio Koike;, CEOP Third Annual Meeting, Geneva, Switzerland, August, 2009.
27. Hui Lu, Toshio Koike, Hideyuki Fujii, Tetsu Ohta and Katsunori Tamagawa, “Monitoring Soil Moisture Change in North Africa with Using Satellite Remote Sensing and Land Data Assimilation System ,” *Proceedings of 2009 IEEE International Geoscience & Remote Sensing Symposium (IGARSS09)*, pp. 972-975, Cape Town, July 2009.
28. Hui Lu, Toshio Koike, Kun Yang, Hiroyuki Tsutsui and Katsunori Tamagawa, “Estimating Land Surface Energy and Water Fluxes by Using the Land Data Assimilation System developed at The University of Tokyo (LDASUT),” *Proceedings of 2009 IEEE International Geoscience & Remote Sensing Symposium (IGARSS09)*, pp. 666-669, Cape Town, July 2009.
29. Mirza, C. R., Toshio K., Kun Y., and Tobias G., The Development o f 1D-Var Cloud Microphysics Data Assimilation System (CMDAS) and its application for retrieving cloud parameters retrievals over the Medjerda Basin by AMSR-E Satellite Data Integration, *MOCA-09 Joint Assembly*, Montréal, Québec, Canada, July 2009.
30. Wang, L., T. Koike, C. T. Nyunt, O. Saavedra, L. C. Nguyen, T. V. Sap, T. Nagano, Distributed Hydrological Modeling in the Red River Basin towards Integrated Water Resources Management, *Global Precipitation Measurement (GPM) Asia Workshop on Precipitation Data Application Technique*, Tokyo, May 2009.
31. Toshio Koike;, 10th Science & Technology Committee meeting, Stresa, Italy, May 2009.

国内学会,ワークショップ,シンポジウム発表 [Domestic Conference, Workshop, Symposium]

1. Hiroaki FUJIMORI, Takeyoshi CHIBANA: Distribution of Riverbed Material on Dry Riverbed of Gravel-Bed Rivers, 第 13 回応用生態工学会研究発表会講演集, pp.245, 2009.

2. Hiroyuki Ikukawa, Takeyoshi Chibana: Sorting Process of Riverbed Material in Pools, 第 13 回応用生態工学会研究発表会講演集, pp.197, 2009.
3. Takanobu MIKUNIYA, Takeyoshi CHIBANA: Morphology of a Riverbed around a Confluence in a Mountainous Region, 第 13 回応用生態工学会研究発表会講演集, pp.203, 2009.
4. TAMBA Masahiro, CHIBANA Takeyoshi : Characteristics of step-pool structure in a mountain stream, 第 13 回応用生態工学会研究発表会講演集, pp.201, 2009.
5. 玉川 勝徳, 小池 俊雄, Hui LU, 藤井秀幸, Kun YANG, Xin Li, Huizhi LIU: 陸面データ同化手法を用いた土壤水分推定に影響を及ぼす植生の不均一性に関する検討, 2010 土壤水分ワークショップ, Tokyo, 14 March 2010.
6. Mohamed RASMY, Toshio KOIKE, Hui Lu (2010), DEVELOPMENT OF A LAND DATA ASSIMILATION SYSTEM COUPLED WITH AN ATMOSPHERIC MODEL BY INTEGRATING AMSR-E MEASUREMENTS, Soil Moisture Workshop March 2010, Tokyo , Japan.
7. Hui Lu, Toshio Koike, Katsunori Tamagawa, Mohamed Rasmy, Hiroyuki Tsutsui, Hedyuki Fujii, Tetsu Ohta; Towards the development of level-3 products of GCOM: estimating hourly soil moisture and land surface energy fluxes by LDAS-UT, Soil Moisture Workshop March 2010, Tokyo , Japan.

#### 招待講演 [Invited lecture]

1. Toshio Koike; Climate Change and Water Cycle Variation - Mechanism, Projection, Assessment and Adaptation - Japan-Denmark Water Forum, Embassy of Denmark in Tokyo, Tokyo, Japan, 23 Feb. 2010.
2. Toshio Koike, DIAS: a system for regional data integration, IGWCO Workshop on Water Resource Assessment and Applications, the city College of New York, USA, 23 Feb. 2010.
3. Toshio Koike and Ron Stewart, Introduction to CEOP Progress and Plans, 22nd Session of the Scientific Steering Group of GEWEX, New Delhi, India, 25 Jan. 2010.
4. Toshio Koike, Integrated Observation and Modeling of Water Cycle, 2010 International Forum on Global Change and Earth System Science, Beijing Normal University, Beijing, China, 21 Jan. 2010.
5. Toshio Koike, Making Global Climate Projections Relevant for Development Planning and Adaptation, United Nations Climate Change Conference, COP15, Copenhagen, Denmark, 13 Dec. 2009.
6. Toshio Koike, Coordinated Energy and Water Cycle Observations Project (CEOP), GEO Alliances and Harmonization Workshop, Washington DC, USA, 11-12 Nov. 2009.
7. Toshio Koike, Data integration and analysis system for water cycle, ILTS International Symposium "Frontier of Low Temperature Science", Hokkaido University, Sapporo, 10 Nov. 2009.
8. 小池俊雄、気候と水循環の変動への適応を支える科学技術、第 111 回平成 21 年秋季東京大学公開講座、東京大学安田講堂、2009 年 10 月 31 日。
9. Toshio Koike; The 30th Asian Association on Remote Sensing, Beijing, China, 20 Oct. 2009
10. Toshio Koike, Integrated Observation and Prediction of Water Cycle Coupled with Passive and Active Microwave Sensors, Einstein Award Lecture at CAREERI/CAS, Beijing, China, 14 Sep.2009.
11. Toshio Koike, Integrated Observation and Prediction of Water Cycle Coupled with Passive and Active Microwave Sensors, Einstein Award Lecture at CAREERI/CAS, Lanzhou, China, 15 Sep.2009.

12. Toshio Koike, Hydrological Process Down-scaling for Reduction of Damages by Water-related Hazards and Climate Change Adaptation, The 8th International Conference on Urban Drainage Modeling, The University of Tokyo, Tokyo, 8 Sep. 2009.
13. Toshio Koike; The 5th International Symposium on Tibetan Plateau / The 24th Himalaya-Karakorum-Tibet Workshop, Beijing, China, 11-14 Aug. 2009.
14. 小池俊雄、マイクロ波放射計による土壌水分観測と陸面データ同化、宇宙・航行エレクトロニクス研究会 宇宙応用シンポジウム 宇宙実証特集—通信・測位・観測、宇宙航空研究開発機構つくば宇宙センター、2009年6月26日
15. Toshio Koike and Kazuhiko Fukami, Japan Experience in Developing Hydroclimate Models (Statistical/Dynamic), Workshop on Developing Water and Climate Change Adaptation Guidelines, Selangor, Malaysia, 27 May 2009
16. Toshio Koike, Planning for a Workshop on Hydroclimate Projections for Water and Climate Adaptation, Workshop on Developing Water and Climate Change Adaptation Guidelines, Selangor, Malaysia, 27 May 2009
- 17.

#### 解説・総説 [comment]

1. 萬和明, 山崎大, 吉田龍平, 新田友子, Yadu Pokhrel, 辻本久美子, 平林由希子, 田中賢治, 檜山哲哉, GEWEX/iLEAPS 合同国際会議参加報告, 水文・水資源学会誌, Vol.23, pp.83-91, 2010.

#### 著書 [Book]

1. 知花武佳 (分担) : 川の百科事典 (編集委員長 高橋裕), 丸善株式会社, 2009.

#### 出版物 [Publicaion]

1. 知花武佳 (分担) 「川の百科事典」 (編集委員長 高橋裕), 丸善株式会社, 2009.
2. Hui Lu, Toshio Koike, Kun Yang, Tetsu Ohta, David Ndegwa Kuria, Kun Yang, Hedeyuki Fujii, Hiroyuki Tsutsui and Katsunori Tamagawa, "Monitoring surface soil moisture with spaceborne passive microwave remote sensing: algorithm developments and applications to AMSR-E and SSM/I," Chapter 17 In "Advances in Geoscience and Remote Sensing", Editor: Gary Jedlovec, pp. 371-390, In-Tech, Vukovar, Croatia, ISBN 978-953-307-005-6, 2009.
3. Yang, K, H. Lu, T Koike: Microwave LDAS improves soil moisture and land flux estimates. /GEWEX News/ 19(3), 2-3,2009

#### 論文賞 [Paper award]

1. 辻本久美子, H21年度 前田記念工学賞・山田一字賞 (土木分野 年間優秀博士論文賞)