

FY2012 (April 2012 – March 2013)

国際誌 [International peer-reviewed journal]

1. Takeyoshi Chibana, Ami Tsuboi: Residents and the River in the Flood Prone Area of Jakarta, *Journal of Asian Urbanism*, No.8, pp.18-19, March/2013.
2. Tsujimoto K. and T. Koike: Requisite conditions for post-monsoon rainfall in Cambodia, *Journal of Hydrosience & Hydraulic Engineering*, Vol.31, No.1, pp.1-14, 2012.
3. Asif M. B., Koike T. and Nasu S.: “Water resources management: Pathways for sustainable economic growth and poverty eradication”, The 8th International Symposium on Social Management Systems SSMS2012, 2-4 May, 2012, Kaohsiung, Taiwan (Peer reviewed)
4. Rasmy, M., T. Koike, D. N. Kuria, C. R. MIRZA, X. Li, and K. Yang, 2012: Development of the Coupled Atmosphere and Land Data Assimilation System (CALDAS) and Its Application over the Tibetan Plateau. *Geoscience and Remote Sensing, IEEE Transactions on*, Vol.50 (11), pp-4227-4242, DOI 10.1109/TGRS.2012.2190517.
5. Hiroyuki TSUTSUI and Toshio KOIKE: Development of Snow Retrieval Algorithm Using AMSR-E for the BJ Ground-Based Station on Seasonally Frozen Ground at Low Altitude on the Tibetan Plateau, *Journal of the Meteorological Society of Japan*, Vol. 90C, pp. 99-112, 2013.1, doi:10.2151/jmsj.2012-C07
6. Shigenori HAGINOYA, Hideyuki FUJII, Jihua SUN, Jianyu LIU: Features of Air-Lake Interaction in Heat and Water Exchanges over Erhai Lake, *Journal of the Meteorological Society of Japan*, Vol. 90C, pp. 55--73, 2012.10
7. Ichiro Kaihitsu, Tosio Koike, Hideyuki Fujii, Tsutomu Yamanaka, Oyunbaatar Dambaravjaa, Azzaya Dorgorsuren, Kazuaki Shiraishi: Validation of the soil moisture measurement algorithm of AMSR-E, *Remote Sensing and Hydrology (Proceedings of a symposium held at Jackson Hole, Wyoming, USA, September 2010)*, IAHS Publ. 352, pp.38-41, 2012.09
8. Daisuke Harada, Takeyoshi Chibana: Forming Process of Vegetated river channel toward Restoration for River Ecosystems, Sep/2012.

国内誌 [Domestic peer-reviewed Journal]

1. Jaranilla-Sanchez, P.A., T. Koike, C.T. Nyunt, M. Rasmy, I. Hasegawa, A. Matsumura, D. Ogawada: Hydrological Impacts of a Changing Climate on Floods and Droughts in Philippine River Basins, *JSCE, Ann.Jour. Hydraul. Eng.-JSCE*, Vol.69, No.4 , pp. I\_13-I\_18, 2013.3..
2. Nyunt, C.T., P.A.J. Sanchez, A. Yamamoto, T. Nemoto, M., Kitsuregawa and T. Koike : Bias correction method for climate change impact assessments in the Philippines, *Ann.Jour. Hydraul. Eng.-JSCE*, Vol 69, No.4, pp I\_19\_I\_24, 2013.3
3. Rasmy, M., T. Koike, P.A.Jaranilla-Sanchez, C.T.Nyunt, M. Hara, M. Fujita and H. Kawase : Identifying Gaps and Opportunities Between Statistical and Dynamical Downscaling Approaches Over Shikoku Island, Japan, *Ann.Jour. Hydraul. Eng.-JSCE*, Vol.69, No.4 , pp. I\_133-I\_138, 2013.3.
4. Felix MUTUA, Mohamed RASMY, and Toshio KOIKE: IMPROVING EXTREME RAINFALL EVENT PREDICTION USING MICROWAVE SATELLITE DATA ASSIMILATION, *Journal of Japan Society of Civil Engineering (JSCE)*, Vol. 69, No.4, , pp. I\_115-I\_120, 2013.3.
5. Shrestha, M., T. Koike, L. Wang, and K. Yoshimura: LONG-TERM (1948-2006) SIMULATION OF SNOW DEPTH AT YAGISAWA DAM SITE USING JP10 REANALYSIS AND ENERGY BALANCE SNOW MODEL (WEB-DHM-S), *Journal of Japan Society of Civil Engineering (JSCE)*, Vol 69, No.4, pp I\_175-I\_183, 2013.3

6. 筒井浩行・小池俊雄：チベット高原における AVNIR-2・MODIS に基づく積雪深の評価手法の考案, 土木学会論文集(水工学), Vol.69, No.4, pp. I\_433-I\_438, 2013.3.
7. 澤田洋平・小池俊雄：分布型水循環－植生動態結合モデルの開発, 水工学論文集, Vol 69, No.4, ppI\_493-I\_498, 2013.3.
8. 原田大輔, 知花武佳：ダムの洪水調節を受ける河川における護岸の粗度と砂州構造との関係, 土木学会論文集 B1(水工学) Vol.69, No.4, pp.1195-1200, 2013年3月.
9. 瀬戸里枝, 小池俊雄, Mohamed RASMY：数値気象モデル WRF を結合した衛星陸面データ同化システムの開発, 水工学論文集 (土木学会水工学委員会), Vol 69, No.4, ppI\_1789-I\_1794, 2013.3
10. Asif M. Bhatti, Toshio Koike. and Seigo Nasu: WATER RESOURCES MANAGEMENT : PATHWAYS FOR SUSTAINABLE ECONOMIC GROWTH AND POVERTY ERADICATION, Journal of Japan Society for Social Management Systems, SMS12-5687, 2012, <http://management.kochi-tech.ac.jp/?content=journalpaper>.
11. AHMAD Syed Iftkhar and Takeyoshi Chibana: SHAPE BASED STOCHASTIC COMPUTATION OF BED LOAD TRANSPORT IN GRAVEL BED RIVERS , Journal of Japan Society of Civil Engineers, Ser. B1 (Hydraulic Engineering), Vol. 68, No. 4, pp.13- 8, 2012.3.
12. 川口淳郎・原田大輔・知花武佳：河道特性が護岸被災の被災形態に与える影響とそのメカニズム, 河川技術に関する論文集 vol.18, pp.257-262, 2012年6月.
13. 山下貴美子, 知花武佳, 原田大輔：砂州形成区間における瀬-淵構造の形態的特徴とその規定要因, 河川技術に関する論文集 vol.18, pp.143-148, 2012年6月.
14. 斉藤思温, 知花武佳, 原田大輔, 伊藤悠：ヨシノボリが選好する載り石環境の成立条件と形成メカニズム, 河川技術に関する論文集 vol.18, pp.95-100, 2012年6月.
15. 原田 大輔, 知花 武佳, 山下 貴美子：人為的改変の影響を受けた河川の構造とその河道形成機構, 土木学会論文集 B1 (水工学) Vol. 68 No. 1, pp.55-66, 2012年6月.

国際学会, ワークショップ, シンポジウム発表 (口頭・ポスター発表を区別し記載ください)

[International Conference, Workshop, Symposium] (Please describe “Oral” or “Poster” for each)

1. Kumiko Tsujimoto, Toshio Koike, So Im Monichoth, Kentaro Aida, Katsunori Tamagawa, Tomoyuki Nukui, and Shin'ichi Sobue: Validation of Satellite Precipitation Products over Cambodia, The 29th International Symposium on Space Technology and Science, June, 2013, submitted.
2. Aida, K., Koike T., Monichoth S.I., Tsujimoto K., Tamagawa K., Nukui T., Sobue S., and Shi J.; Development of soil moisture algorithm using ALOS/PALSAR in paddy field, Cambodia, proceedings, 29th International Symposium on Space Technology and Science, 2013, submitted.
3. Katsunori TAMAGAWA, Mohamed RASMY, Kentaro AIDA, Kumiko TSUJIMOTO, Toshio KOIKE, So Im MONICOTH, Tomoyuki NUKUI, Shin'ichi SOBUE: Investigation of the Estimation of Soil moisture and the Soil Parameter in the Dry Season in Cambodia Using the Land Data Assimilation System Developed at the University of Tokyo(LDAS-UT), proceedings, 29th International Symposium on Space Technology and Science, 2013, submitted.
4. Hiroyuki Tsutsui and Toshio Koike: Snow and cloud monitoring toward solid precipitation observation, March 9, 2013, Mini-Workshop on A-Train Science, Tokyo, Japan, ( Oral Presentation).

5. C.T. Nyunt, T. Koike, A. Yamamoto, T. Nemoto and M. Kitsuregawa : Application of Statistical Bias correction Method for Climate Change Impact Assessment in Kalu Ganga Basin, Sri Lanka. Conference on Sri Lanka Japan Collaborative Research 2013, 29 – 31 March 2013. (Oral)
6. Rie Seto, Mohamed Rasmy, Toshio Koike: Development of WRF and SiB2 based satellite land data assimilation system, American Geophysical Union Fall Meeting, A11E, San Francisco, CA, U.S.A., 3 December 2012 (poster)
7. Yohei Sawada, Toshio Koike: Impact of climate change on vegetation dynamics in a West African river basin, AGU Fall Meeting, San Francisco, USA, 3-7 December 2012 (Poster)
8. Shrestha, M., L. Wang, T. Koike, Y. Xue, Y. Hirabayashi, and S. Ahmad: Energy balance-based distributed modeling of snow and glacier melt runoff for the Hunza river basin in the Pakistan Karakoram Himalayan region, American Geophysical Union (AGU) Fall Meeting, C13D-0644 Poster, 3-7 December, San Francisco, USA, 2012.- Poster Presentation.
9. Mutua, F., T. Koike, and M. Rasmy,: Improving extreme rainfall event prediction using microwave satellite data assimilation and bogus wind modification, AGU Fall meeting , 3-7 December,2012, ED13C-0078, San Francisco, USA
10. Jaranilla-Sanchez, P.A., Koike, T., and Nyunt, C.T.: Climate Change Assessment and Runoff Simulation in Philippine Basins for the Water Security Master Plan of Metro Manila and its Adjoining Areas, Poster Presenter in the American Geophysical Union Conference in San Francisco, CA, USA. Dec. 2-8, 2012.H41B-1169—(poster).
11. C.T. Nyunt, T. Koike, P.A.J. Sanchez, A. Yamamoto, T. Nemoto and M. Kitsuregawa: American Geophysical Union Annual Fall Meeting, 3-7 December , San Francisco, USA, 2012. (Poster )
12. Shrestha, M., L. Wang, T. Koike, Y. Xue, and Y. Hirabayashi: Towards improved snow and glacier melt simulation in a distributed hydrological framework: Application at Narayani river basin of central Nepal Himalaya, 27th Himalaya-Tibet-Karakoram (HKT) Workshop, 28-30 November, Kathmandu, Nepal, 2012. (Abstract published in Journal of Nepal Geological Society, Vol 45, Special Issue, Page 96) – Oral Presentation
13. HARADA Daisuke and CHIBANA Takeyoshi : Characteristics of Sequential variation in River Channel Width in the Watarase River, Japan, Proc.of The 18th Congress of the Asia and Pacific Division of the International Association for Hydro-Environment Engineering and Research, pp.473-474, Aug/2012. (Oral Presentation).
14. Yohei Sawada, Toshio Koike : Towards sustainable water resource management against severe droughts in West Africa, ASLO Aquatic Sciences Meeting, Lake Biwa, Otsu, Shiga, Japan, 8-13 July, 2012 (Oral)
15. M. Rasmy, T. Koike, and H. Lu,: COUPLED ATMOSPHERE AND LAND DATA ASSIMILATION SYSTEM (CALDAS): TOWARDS IMPROVING THE PREDICTABILITY OF NUMERICAL WEATHER PREDICTION MODELS, IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 22-27 July 2012, Munich, Germany.
16. Lu, H., T. Koike, and M. Rasmy,: ESTIMATING ENERGY, WATER AND CARBON FLUX OVER AFRICA WITH USING A LAND DATA ASSIMILATION SYSTEM, IEEE International Geoscience and Remote Sensing Symposium (IGARSS), 22-27 July 2012,Munich, Germany.
17. Jaranilla-Sanchez, P., L. Wang and T. Koike.: Presented on Water Use Quantification in Angat watershed, Philippines, SSMS The 8th International Symposium on Social Management Systems SSMS2012 - Disaster Prevention and Reconstruction Management -, 2-4 May 2012, Kaohsiung, Taiwan, R.O.C.
18. Kentaro Aida: Soil moisture observation from satellite by using PALSAR, The Stakeholder Meeting on Hydrology and Water Management in Cambodia, May 4, 2012.

19. Katsunori Tamagawa: Soil moisture observation from satellite by using AMSR-E, The Stakeholder Meeting on Hydrology and Water Management in Cambodia, May 4, 2012. (Oral)
20. C.T. Nyunt, T. Koike, A. Yamamoto, T. Nemoto and M. Kitsuregawa: Bias correction and Spatial Disaggregation for Climate Change Impact Assessments at a basin scale, European Geosciences Union General Assembly 2013, Vienna, Austria, 7-12 April 2013. (Oral)
21. Rasmy, M., T. Koike 2012: A Satellite Land Data Assimilation System Coupled with a Mesoscale Atmospheric Model: Towards Improving Numerical Weather Prediction, EGU General Assembly 2012, Vol. 14, EGU2012-13163-7, 2012, 19-27 April 2012 in Vienna, Austria.
22. Shrestha, M., L. Wang, T. Koike, H. Tsutsui, Y. Xue, and Y. Hirabayashi: Inverse simulation of snowmelt runoff and snow cover area using the energy balance-based distributed snowmelt model (WEB-DHM-S) for the correction of basin-scale snowfall, European Geosciences Union (EGU), General Assembly, Geophysical Research Abstracts, Vol. 14, EGU2012-3444, 22-27 April, Vienna, Austria, 2012. - (Poster Presented without visit) .
23. Duran-Ballen, S., Tsutsui, H., Koike, T.: An Aggregation Process for Estimation of Snow Depth using Microwave Remote Sensing in Mountain Region. European Geosciences Union (EGU) General Assembly 2013, Vienna, Austria. 7-12 April 2013. Abstract No. 581-2. - (Oral Presentation).
24. Takeyoshi CHIBANA and Ami TSUBOI: Hierarchical analysis of ground water condition in the Watarase Retarding Basin toward the wetland restoration, Proc.of The 18th Congress of the Asia and Pacific Division of the International Association for Hydro-Environment Engineering and Research, pp.462-463, 2012. (Oral Presentation).
25. HARADA Daisuke and CHIBANA Takeyoshi : Characteristics of Sequential variation in River Channel Width in the Watarase River, Japan, Proc.of The 18th Congress of the Asia and Pacific Division of the International Association for Hydro-Environment Engineering and Research, pp.473-474, Aug/2012.

国内学会,ワークショップ,シンポジウム発表(口頭・ポスター発表を区別し記載ください)

[Domestic Conference, Workshop, Symposium] ] (Please describe “Oral” or “Poster” for each)

1. 原田大輔, 知花武佳: 礫河原上の樹林化が進行した河川の特徴と進行のメカニズム, ELR 東京 (日本緑化工学会, 日本景観生態学会, 応用生態工学会 三学会合同大会) 講演要旨集, pp.152, 2012. (ポスター).
2. 伊藤悠, 知花武佳: ヨシノボリの産卵床となる載り石環境の成立条件に関する研究, ELR 東京 (日本緑化工学会, 日本景観生態学会, 応用生態工学会 三学会合同大会) 講演要旨集, pp.159, 2012. (ポスター).
3. 知花武佳, 坪井亜美: 渡良瀬遊水地における湿地環境変化に関する考察, ELR 東京 (日本緑化工学会, 日本景観生態学会, 応用生態工学会 三学会合同大会) 講演要旨集, pp.166, 2012. (ポスター).
4. 玉川勝徳, 生駒栄司, 絹谷弘子, 大柳美佐, 太田哲, 小池俊雄, 喜連川優, 松本淳: GEOSS/AWCI と WCRP/AMY における In-situ データアーカイブ: 日本地球惑星科学連合 2012 年大会, 千葉, 2012 年 5 月 23 日. (ポスター).

招待講演 [Invited lecture]

1. 小池俊雄、井原健雄、那須清吾：気候変動の予測・影響と適応の方法(座談会)、高松、平成 25 年 3 月 10 日
2. 小池俊雄：アジア太平洋地域における水と気候変動適応策について、日本水フォーラム・国連「世界水の日」記念イベント～第 2 回アジア・太平洋水サミットに向けて～、都市センターホテル、東京、平成 25 年 2 月 20 日
3. Toshio Koike: Background to the African Water Cycle Coordination Initiative, Third GEOSS African Water Cycle Coordination Initiative (AfWCCI) Workshop, Art Suites Hotel, Morocco, February 4, 2013
4. 小池俊雄：水循環データの統合的利用により公共的利益の創出、パスコ企業内大学講演会、株式会社パスコ研究開発センター、東京、平成 25 年 2 月 8 日
5. 小池俊雄：1 人称の DIAS、海洋研究開発機構、神奈川、平成 25 年 1 月 23 日
6. 小池俊雄、井原健雄、那須清吾：気候変動と適応策に関するシンポジウム、高松、平成 25 年 1 月 19 日
7. 小池俊雄、井原健雄、那須清吾：気候変動と適応策に関するシンポジウム、徳島、平成 25 年 1 月 12 日
8. 小池俊雄、井原健雄、那須清吾：気候変動の不確実性を考慮した予測・影響(座談会)、高松、平成 24 年 11 月 18 日
9. Shrestha, M.: Flood Hazard Mapping, Lecture for M.Sc. Students of Department of Environmental Science, Tribhuvan University, Kathmandu, Nepal, 28 November, 2012.
10. Toshio Koike, Katsunori Tamagawa,: Rainfall bias correction, hands on exercise, Fall 2012 Training on Climate Change, Downscaling Approaches and Applications(CCDAA) by UNU-CECAR, Asian Institute of Technology, Bangkok, Thailand, 12-13, November, 2012.
11. 小池俊雄：気候変動と地球温暖化について、エコひろば・温暖化防止市民講座、八王子市北野余熱利用センターあったかホール、東京、平成 24 年 10 月 20 日
12. Shrestha, M., and T. Koike: Development of water and energy budget based hydrological model for rainfed, snow and glacierized river basins; Applications at Hindukush Karakoram Himalaya (HKH) basins, Stakeholders meeting of Asian Water Cycle Initiative (AWCI) at Pakistan Meteorological Department, 11 September, 2012, Islamabad, Pakistan.
13. 小池俊雄：気候の変化と水危機－変化する地球を生き抜く科学技術－、日本航空宇宙工業協会講演会、日本航空宇宙工業会、東京、平成 24 年 9 月 14 日
14. Toshio Koike: Water Cycle Data Integration toward Better Water Resources Management under Climate Change, National University of Science and Technology, Pakistan, 11,Sep.2012
15. 小池俊雄：「変化する水の循環」、GRENE 流域レジリエンス朱太川キックオフフォーラム、北見工科大学 黒松内町、平成 24 年 5 月 16 日

#### 解説・総説 [comment]

1. 土居範久、小池俊雄、渡邊堯：WDS 設立までの経緯、特集 1・科学データの長期保全とグローバルな共有－ICSU 世界データシステムの構築－、学術の動向 2012.6 (第 17 巻第 6 号)、pp16-19、平成 24 年 6 月 1 日

2. 小池俊雄：地球観測データの統合、特集1・科学データの長期保全とグローバルな共有—ICSU世界データシステムの構築—、学術の動向 2012.6（第17巻第6号）、pp16-19、平成24年6月1日
3. 本間正修、小池俊雄、池内幸司：新世紀の社会基盤として人工衛星の展開 座談会 衛星観測データのさらなる活用フェーズに向けて、土木学会誌 2012年7月号 Vol.97 no.7、pp31-34、平成24年7月15日
4. 知花武佳：権現堂用水樋管群-桜の名所に残る煉瓦樋管と水との戦いの歴史-、見どころ土木遺産 93、土木学会誌 2012年4月号 Vol.97. no.4, pp48-49, 2012.

#### 出版物 [Publication]

1. 知花武佳：歴史的土木構造物の保全（土木学会歴史的構造物保全技術連合小委員会編）「3章7節 河川構造物」、鹿島出版会、2010.
2. 知花武佳（分担）：日本のかわと河川技術を知る～利根川～（公益社団法人 土木学会水工学委員会、日本のかわと河川技術を知る（利根川）編集委員会 編）、「4章 利根川の環境」、土木学会、2012.

#### 論文賞 [Paper award]

1. Mohamed Rasmy: 第57回水工学講演会、国際セッション優秀論文賞、土木学会水工学委員会、2013.03.
2. Jaranilla-Sanchez, P., L. Wang and T. Koike: SSMS paper Award 201. Towards Managing Droughts in A Changing Climate: A study of Southeast Asian Watersheds. Paper Code: SMS11-9829. (Awarding will be held during the SSMS 2012, Kaohsiung, Taiwan on May 2-4, 2012)

#### ニュース報道 [News media]

1. 小池俊雄：The Stakeholder Meeting on Hydrology and Water Management in Cambodia, カンボジア TV ニュース報道、2012年5月4日
2. 小池俊雄：“世界2位”に浮上した東京大学・土木の人材育成、日経コンストラクション、平成24年9月25日  
<http://nkkp.jp/article/const/news/20120924/584521/>