

FY2011 (April 2011 – March 2012)

国際誌 [International peer-reviewed journal]

1. Wang, F., L. Wang, T. Koike, H. Zhou, K. Yang, A. Wang, and W. Li (2011), Evaluation and application of a fine-resolution global data set in a semiarid mesoscale river basin with a distributed biosphere hydrological model, *Journal of Geophysics Research*, 116, D21108, doi:10.1029/2011JD015990.
2. Hui Lu, Toshio Koike, Kun Yang, Zeyong Hu, Xiangde Xue, Mohamed Rasmy, David Kuria, Katsunori Tamagawa: Improving land surface soil moisture and energy flux simulations over the Tibetan plateau by the assimilation of the microwave remote sensing data and the GCM output into a land surface model. *Int. J. Appl. Earth Observ. Geoinf.* (2011), doi:10.1016/j.jag.2011.09.006.
3. Shrestha, M., L. Wang, T. Koike, Y. Xue, and Y. Hirabayashi: Modeling the spatial distribution of snow cover in the Dudhkoshi region of Nepal Himalaya, *J. Hydrometeor.*, doi: 10.1175/JHM-D-10-05027.1., Vol 13, 204-222, 2012.
4. Shrestha, M., L. Wang, T. Koike, H. Tsutsui, Y. Xue, and Y. Hirabayashi: Correction of basin-scale snowfall through the inverse simulation of snowmelt runoff and snow cover area using energy balance-based distributed snowmelt model (WEB-DHM-S), *J. Hydrometeor.* (Submitted)
5. Tsujimoto K. and T. Koike, Requisite conditions for post-monsoon rainfall in Cambodia, *Journal of Hydroscience & Hydraulic Engineering*, 2011, in printing.
6. Rasmy, M., T. Koike, D. N. Kuria, C. R. MIRZA, S. Boussetta, H. Lu, and X. Li, 2011: Development of a satellite land and atmosphere coupled data assimilation system in Tibetan Plateau, *IEEE Transactions on Geosciences and Remote Sensing*, Submitted.
7. 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. 1-15, 2012 (In press).
8. Lei Wang, Toshio Koike, Man Wang, Jianyu Liu, Jihua Sun, Hui Lu, Hiroyuki Tsutsui, Katsunori Tamagawa, Xiangde Xu: Use of integrated observations to improve 0-36h flood forecasting: development and application of a coupled atmosphere-hydrology system in the Nanpan River Basin, China, *Journal of the Meteorological Society of Japan*, DOI:10.2151/jmsj.2012-C , Vol.90C, 2012 (In press).
9. Kenichi Ueno, Shiori Sugimoto, Hiroyuki Tsutsui, Kenji Taniguchi, Zeyong Hu, Shihong Wu: Role of patchy snow cover on the planetary boundary layer structure during late winter observed in the central Tibetan Plateau, *Journal of the Meteorological Society of Japan*, DOI:10.2151/jmsj.2012-C , Vol.90C, 2012 (In press).
10. Jun QIN, Kun YANG, Toshio KOIKE, Hui LU, Yaoming MA, Xiangde XU: Evaluation of AIRS Precipitable Water Vapor against Ground-based GPS Measurements over the Tibetan Plateau and Its Surroundings, *Journal of the Meteorological Society of Japan*, DOI:10.2151/jmsj.2012-C , Vol.90C, 2012 (In press).
11. Kenji TANIGUCHI, Toru TAMURA, Toshio KOIKE, Kenichi UENO, Xiangde XU: Atmospheric conditions and increasing temperature over the Tibetan Plateau during early spring and the pre-monsoon season in 2008, *Journal of the Meteorological Society of Japan*, DOI:10.2151/jmsj.2012-C , Vol.90C, 2012 (In press).
12. Xingwen JIANG, Yueqing LI, Xingbing ZHAO, Toshio KOIKE: Characteristics of the summertime boundary layer and atmospheric vertical structure over the Sichuan Basin, *Journal of the Meteorological Society of Japan*, DOI:10.2151/jmsj.2012-C , Vol.90C, 2012 (In press).

13. Lingen BIAN, Zhiqiu GAO, Yongfeng MA, Toshio KOIKE, Yaoming MA, Yueqing LI, Jihua SUN, Zeyong HU, Xiangde XU: Seasonal Variation in Turbulent Fluxes over Tibetan Plateau and its Surrounding Areas, Journal of the Meteorological Society of Japan, DOI:10.2151/jmsj.2012-C, Vol.90C, 2012 (In press).
14. Renhe ZHANG, Toshio KOIKE, Xiangde XU, Yaoming MA, Kun YANG: A China-Japan Cooperative JICA Atmospheric Observing Network over the Tibetan Plateau (JICA/Tibet Project): An Overview, Journal of the Meteorological Society of Japan, DOI:10.2151/jmsj.2012-C, Vol.90C, 2012 (In press).
15. Xiangde XU, Jibing GUO, Toshio KOIKE, Xiaohui SHI, Fucheng ZHU, Yujie LIU, Shenjun ZHANG: Downstream effect" of winter snow cover over the eastern Tibetan Plateau on climate anomalies in East Asia, Journal of the Meteorological Society of Japan, DOI:10.2151/jmsj.2012-C, Vol.90C, 2012 (In press).

国内誌[Domestic peer-reviewed Journal]

1. 会田健太郎・小池俊雄・Jiancheng SHI, カンボジア水田地域における ALOS/PALSAR 多偏波データを用いた土壤水分推定アルゴリズムの検証, 水工学論文集第 56 卷
2. 辻本久美子, 小池俊雄, 空間スケールの異なる 2 つの日周変化システムとそれがインドシナ半島内陸部ポストモンスーン期降水に与える影響, 土木学会論文集 B1(水工学) Vol.68, No.4, I_451-I_456, 2012.
3. Shrestha, M., L. Wang, Y. Hirabayashi, and T. Koike: Simulation of Forest snow processes at Fraser with a energy balance based snow melt model (WEB-DHM-S), Ann. J. Hydraul. Engg., JSCE, 56, I229-I234, 2012
4. Duran-Ballen, S.; Shrestha, M.; Wang, L., Koike, T.; Snow Cover Modeling at the Puna Tsang River Basin in Bhutan with corrected JRA-25 Temperature. Annual Journal of Hydraulic Engineering, JSCE, Vol. 56, February 2012.
5. 筒井浩行・小池俊雄・青梨和正・杉浦幸之助・藤井秀幸: 北極寒冷圏積雪域における雲水量・積雪物理量の推定手法に関する基礎的研究, 水工学論文集, 第 56 卷, pp. I_319-I_324, 2012.
6. Cho Thanda NYUNT, Hiroki YAMAMOTO, Akio YAMAMOTO, Toshihoro NEMOTO4, Masaru KITSUREGAWA and Toshio KOIKE: A PPLICATION OF BIAS-CORRECTION AND DOWNSCALING METHOD TO KALU GANGA BASIN IN SRI LANKA, Journal of Japan Society of Civil Engineering, Vol. 56, No. 4, I_115-I_120, 2012.
7. Patricia Ann JARANILLA-SANCHEZ, Lei WANG, Katsunori TAMAGAWA, Izumi HASEGAWA, Hiroki YAMAMOTO and Toshio KOIKE: INTEGRATED MODELING OF CLIMATE CHANGE IMPACTS IN THE YOSHINO RIVER BASIN, JAPAN FOR BASIN MANAGEMENT PLANNING, Journal of Japan Society of Civil Engineering, Vol. 56, No. 4, I_133-I_138, 2012.
8. Shakil AHMAD, Kazuaki NISHII, Toru TAMURA, Tetsu OHTA, Eiji IKOMA, Masaru KITSUREGAWA and Toshio KOIKE: CHARACTERISTICS OF CLIMATOLOGICAL TROPOSPHERIC CONDITIONS DURING PRE-MONSOON AND MATURED PHASES OF PAKISTAN SUMMER MONSOON, Journal of Japan Society of Civil Engineering, Vol. 56, No. 4, I_157-I_162, 2012.
9. Martín GÓMEZ GARCÍA A. and Toshio KOIKE: MULTISCALE ANALYSIS OF SATELLITE-DERIVED PRECIPITATION ESTIMATES LINKED TO IN-SITU MEASUREMENTS, Journal of Japan Society of Civil Engineering, Vol. 56, No. 4, I_169-I_174, 2012.

10. Felix MUTUA, Lei WANG, Akio YAMAMOTO, Toshihoro NEMOTO, Masaru KITSUREGAWA, and Toshio KOIKE: REGIONAL CLIMATE CHANGE AND ITS IMPACTS ON FUTURE DISCHARGES AND FLOW CHARACTERISTICS OF THE NYANDO BASIN, KENYA, Journal of Japan Society of Civil Engineering, Vol. 56, No. 4, I_205-I_210, 2012.

11.

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. Takashi Ueda, Toshio Koike, Lei Wang: Application of a distributed hydrological model and satellite observations for soil moisture and groundwater level simulation, WCRP Open Science Conference, Denver, 24-28 October 2011. (Poster Presentation)
2. Yohei Sawada , Toshio Koike: Effects of the land-atmosphere interaction on the West African monsoon onset, WCRP Open Science Conference, Denver, 24-28 October 2011. (Poster Presentation)
3. Shrestha, M., L. Wang, T. Koike, H. Tsutsui, Y. Xue, and Y. Hirabayashi: A new method for basin-wide solid precipitation(snowfall) correction through the distributed hydrological modeling and satellite data, World Climate Research Program (WCRP)- Open Science Conference (OSC), 24-28 October, Denver, Colorado, USA, 2011. – (Poster)
4. Shrestha, M., L. Wang, T. Koike, H. Tsutsui, Y. Xue, and Y. Hirabayashi: Simulation of the spatial distribution of snow cover in the Dudhkoshi region of Nepal Himalaya, one of the regions of Third Pole Environment (TPE), European Geosciences Union (EGU), General Assembly, Geophysical Research Abstracts, Vol. 13, EGU2011-1836, 3-8 April, Vienna, Austria, 2011. - (Poster)
5. Ahmad. S., T. Koike, T. Tamura, K. Nishii, and M. Shrestha: Role of Anomalous States of Upper Tropospheric Circulation on Extremely Dry and Wet Summer Monsoon Events, American Geophysical Union (AGU) Fall Meeting, 2011. (Poster)
6. Koike, T., M. Shrestha, K. Aida, an K. Tamagawa: Modeling the spatial distribution of snow cover, snow & glacier melt runoff in the Hunza basin, and flood monitoring using ALOS data in Indus region of Pakistan, 5th International Conference on Flood Management , 28 - 29 September 2011, Tokyo, Japan. (Poster)
7. Jaranilla-Sanchez, P.A., L. Wang and T. Koike (2011). Towards Managing Droughts in a changing climate: A study of Southeast Asian Watersheds. IESL-SSMS Joint International Symposium on Social Management Systems 2011. September 14-16, 2011, Colombo, Sri Lanka. (Proceedings: pp.173 – 181.) (Oral Presentation)
8. Jaranilla-Sanchez, P.A., L.Wang and T. Koike (2011). Droughts in the Philippines: The case of the Pampangga River Basin. Presented during the GEOSS Hydrology Workshop XLI, Vancouver, Canada. July 24, 2011. (Oral Presentation)
9. Jaranilla-Sanchez, P.A., Wang, L., Ohta, T., Imada, Y., Kimoto, M. and T. Koike. 2011. The Drought Interest Group extreme events prediction from seasonal climate forecasting and distributed hydrological modeling simulations. 2011 WCRP Open Science Conference, Denver, Colorado, USA, 24-29 October 2011. TH91A.(Poster)
10. So Im Monichoth, Long Saravuth, Toshio Koike, Kumiko Tsujimoto, Kentaro Aida, Katsunori Tamagawa, Water Cycle and Agricultural Activities during the Post-Monsoon Season in the Stung Sangker River Basin and wider area in the Western Cambodia, The 3rd SAFE Workshop, Vientiane, Laos, 16-17 June, oral
11. Shinichi SOBUE, Tomoyuki NUKUI, Toru FUKUDA, Toshio KOIE, Kumiko TSUJIMOTO, and Wataru TAKEUCHI, THE OVERVIEW OF SPACE APPLICATIONS FOR ENVIRONMENT

- INITIATIVES (SAFE), The Second International MAHASRI/HyARC Workshop on Asian Monsoon and Water Cycle, Nha Trang, Viet Nam, August 22-24, 2011, oral.
12. Tsujimoto K. and T. Koike, The post-monsoon rainfall in the western Cambodia – its mechanism and occurrence factors, WCRP Open Science Conference, October 2011, poster.
 13. Rasmy, M., T. Koike, 2011: Development Of Satellite Microwave Land And Atmosphere Coupled Data Assimilation System, World Climate Research Programme Open Science Conference, 24-28 October 2011 in Denver, Colorado, USA . – Poster
 14. Rasmy, M., T. Koike, S. Boussetta, and X. Li, 2011: A Satellite Land Data Assimilation System Coupled With A Mesoscale Model: Towards Improving Numerical Weather Prediction. IESL-SSMS Joint International Symposium Social Management Systems 2011, held on 14-16 September, 2011 in Colombo, Sri Lanka. – Oral Presentation
 15. Ahmad. S., Koike, T., Tamura, T., Nishii, K., Rasmy M. A. W.: Role of Anomalous States of Upper Tropospheric Circulation on Extremely Dry and Wet Summer Monsoon Events, Abstract ID 75588, World Climate Research Programme (WCRP) Open Science Conference, 2011. (Abstract approved for Poster Presentation, but did not visit)
 16. Ahmad. S., Koike, T., Tamura, T., Nishii, K, Shrestha, M.: Role of Anomalous States of Upper Tropospheric Circulation on Extremely Dry and Wet Summer Monsoon Events, American Geophysical Union (AGU) Fall Meeting, 2011. (Poster Presentation)
 17. Katsunori Tamagawa; Toshio Koike; Eiji Ikoma; Hiroko Kinutani; Tetsu Ohta; Misa Oyanagi; Masaru Kitsuregawa: In-situ data management framework of the GEOSS/Asian Water Cycle Initiative (AWCI) demonstration basin, WCRP Open Science Conference, Denver, CO, USA, 25 October 2011(Poster).
 18. Toshio KOIKE, Maheswor SHRESTHA, Kentaro AIDA, Katsunori TAMAGAWA: Modeling the spatial distribution of snow cover, snow & glacier melt runoff in the Hunza basin, and flood monitoring using ALOS data in Indus region of Pakistan, 5th International Conference on Flood Management , 28 - 29 September 2011, Tokyo, Japan.
 19. C. Nyunt, H. Yamamoto, A. Yamamoto, T. Nemoto, M. Kitsuregawa and T. Koike: Bias correction and Downscaling of GCM for Basin scale simulation, European Geosciences Union (EGU), General Assembly 2012, Geophysical Research Abstracts, Vol. 14, EGU2012 (Abstract approved for Poster Presentation, but did not visit)
 20. So Im Monichoth, Kumiko Tsujimoto, Toshio Koike, Long Saravuth, Katsunori Tamagawa, Kentaro Aida: WATER CYCLE AND AGRICULTURAL ACTIVITIES DURING THE POST-MONSOON SEASON IN THE STUNG SANGKER RIVER BASIN AND WIDER AREA IN THE WESTERN CAMBODIA, The 8th Meeting of the GEOSS/AWCI International Coordination Group (ICG). The 1st Climate Change Assessment and Adaptation (CCAA) Workshop.
 21. So Im Monichoth, Kumiko Tsujimoto, Toshio Koike, Long Saravuth, Katsunori Tamagawa, Kentaro Aida: WATER CYCLE AND AGRICULTURAL ACTIVITIES DURING THE POST-MONSOON SEASON IN THE STUNG SANGKER RIVER BASIN AND WIDER AREA IN THE WESTERN CAMBODIA, SAFE workshop in APRSAF-18, Singapore, December 2011.
 22. Kumiko Tsujimoto, Long Saravuth, Toshio Koike, So Im Monichoth, Kentaro Aida, Katsunori Tamagawa, Land-Lake-Atmosphere Interaction and Its Effects on Rainfall, Soil Moisture, and Local Water Use in Cambodia, The Second Asia/Oceania Meteorological Satellite Users' Conference, December 2011.
 23. Kumiko Tsujimoto, Local Rainfall in Cambodia – its Mechanism and Detectability by TRMM 3B42 and GSMP, The 3rd GPM Asia Workshop on Precipitation Data Application Technique, December 2011.

24. Kumiko Tsujimoto and Toshio Koike, Application of Advanced Technology for IWRM including adaptation to Climate Change - GEOSS Asian Water Cycle Initiative-, March 2012.
25. Toshio Koike, Xiaoliu Yang, Stuart Orr, Andre Dzikus, Margaret Catley-Carlson, Eye on Asia: Leaders' Dialogue: Ensuring Water Security in the Asia-Pacific Region, world water week 21-27 August, 2011 Stockholm, Sweden. (Seminar)
26. Toshio Koike, GEOSS Water Cycle Integrator toward Asian regional coordination, The 8th Meeting of the GEOSS/AWCI International Coordination Group (ICG) The 1st Climate Change Assessment and Adaptation (CCAA) Workshop, Coex, World Trade Center, Seoul, South Korea, 6th - 8th October 2011
27. Toshio Koike, (講演内容不明)The 18th Session of the Asia-Pacific Regional Space Agency Forum (APRSAF-18) Singapore 6-9 December 2011
28. Toshio Koike, Regional Activities in Asia, Latin America, and Africa, GEO-UNESCO Joint Workshop on Earth Observations and Capacity Development for Integrated Water Resources Management at River Basins in Africa, Nairobi, Kenya, 12 - 16 January, 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. 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 : GEOSS/AWCIにおけるデータアーカイブ : 日本地球惑星科学連合 2011 年大会, 千葉, 2011 年 5 月 27 日. (ポスター).
- 2.

招待講演 [Invited lecture]

1. Jaranilla-Sanchez, P.A., Wang, L. and T.Koike. 2011. Droughts: A workbench in Monitoring and Prediction. Expert presentation for the Asian Water Cycle Initiative, October 7-8, 2011, COEX, Seoul, Korea. (Oral Presentation)
2. Shrestha, M., L. Wang, Duran-Ballen, S., and T. Koike: Modeling of snow and glacier melt runoff, The 8th Meeting of the GEOSS/AWCI International Coordination Group (ICG), and The 1st Climate Change Assessment and Adaptation (CCAA) Workshop, 4-6 October, 2011, Seoul, Korea (Oral)
3. Shrestha, M., and T. Koike: Snow and glacier melt modeling in Hunza basin of Pakistan, Workshop entitled "Impact of climate change on Indus River Basin", Pakistan Meteorological Department, 15 September, 2011, Islamabad, Pakistan.
4. 小池俊雄、 Integrated Earth Observations and Predictions toward Flood and Water Use Management under the Climate Change 「気候変動下の洪水・水利用管理に向けた地球観測・予測の統合的利用」、土木研究所水災害・リスクマネジメント国際センター、つくば市、平成 23 年 4 月 13 日
5. 小池俊雄、地球規模から流域規模の水のうごきを観る科学技術、第 155 回河川文化を語る会、厚生会館（全国土木建築健保）、東京、平成 23 年 4 月 22 日
6. 小池俊雄、データ統合・解析システム(DIAS) の概要 Introduction for the data integration and analysis system (DIAS)、日本地球惑星科学連合 2011 年度連合大会、幕張メッセ国際会議場、千葉、平成 23 年 5 月 26 日

7. 小池俊雄、気候変動と地球温暖化について、エコひろば・地球温暖化防止講演会、芸術文化会館いちょうホール、東京、平成 23 年 5 月 28 日
8. 小池俊雄、<タイトル要確認>、地球観測を考える会 平成 23 年度特別講演会、東京大学生産技術研究所、東京、平成 23 年 6 月 15 日
9. Toshio Koike, Data Integration and Analysis System (DIAS), a legacy for Japan's contributions to the Global Earth Observation System of Systems, The First ICSU World Data System Conference –Global Data for Global Science–, Kyoto University, Kyoto, Japan, 4 Sep. 2011.
10. 小池俊雄、吉野川における気候変化の影響評価、第 15 回四国水問題研究会、高知工科大学、高知、平成 23 年 9 月 26 日
11. 小池俊雄、地球観測・予測データの統融合、「トーゴーの日シンポジウム 2011」～ライフサイエンス分野のデータベース統合の“カタチ”を探る～、日本科学未来館 みらい CAN ホール、東京、平成 23 年 10 月 5 日
12. 小池俊雄、気候変動と地球温暖化の関係、エコひろば・地球温暖化防止講演会、あつたかホール八王子・北野余熱利用センター、東京、平成 23 年 10 月 22 日
13. 小池俊雄、<タイトル要確認>、東京工業大学、東京、平成 23 年 11 月 4 日
14. Toshio Koike, GEOSS Water Cycle Integrator An Innovative Tool Contributing to Integrated Human Security and Green Growth, Research and Development Seminar, ICHARM, Tsukuba, Japan, 13 Dec. 2011
15. 小池俊雄、気候変化に適応する河川・水資源管理、エネルギーモデル検討委員会、エネルギー総合工学研究所、東京、平成 23 年 12 月 21 日
16. 小池俊雄、気候と水循環：その関連性と変化、技術開発コンソーシアム研究発表/X バンド MP レーダシンポジウム、東京、平成 24 年 1 月 27 日
17. Toshio Koike, Climate Change and Water Cycle Variability, -Mechanism, Assessment and Adaptation-, Institute for Sustainability and Peace, United Nations University, Tokyo, 14 Mar. 2012

解説・総説 [comment]

1. 小池俊雄、人類の統合的な安全保障とグリーン経済に貢献する科学技術、河川 2012-1 月号（第 786 号）特集・水害軽減に関する国際協力、pp80-85、平成 24 年 1 月 20 日

出版物 [Publicaion]

1. 小池俊雄、気候変動時代の防災都市デザイン、竹村真一+丸の内地球環境俱楽部編著・地球大学講義録 3・11 後のソーシャルデザイン、pp130-145、平成 23 年 7 月 25 日

論文賞 [Paper award]

1. 辻本久美子、水工学論文奨励賞、土木学会水工学委員会、2012.03.
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)