

PUBLICATIONS

Peer-reviewed Journal Publications

(a) English

1. Shrestha, B.B., Rasmy, M., Ushiyama, T. et al. Assessing climate change-driven social flood exposures and flood damage to residential areas in the Solo River basin of Indonesia. *Model. Earth Syst. Environ.* 11, 144 (2025). <https://doi.org/10.1007/s40808-025-02330-1>
2. Chamal Perera, Katsunori Tamakawa, Mohamed Rasmy, Tomoki Ushiyama, Shinichiro Nakamura,
3. Socio-hydrological prediction of soft-path vs. hard-path in flood risk management under climate change: A case study from the Lower Kelani River Basin, Sri Lanka, *Journal of Hydrology: Regional Studies*, Volume 58, 2025, 102230, ISSN 2214-5818, <https://doi.org/10.1016/j.ejrh.2025.102230>.
4. Shrestha, B. B., Rasmy, M., Ushiyama, T., Acierto, R. A., Kawamoto, T., Fujikane, M., Shinya, T., & Kubota, K. (2025). Assessment of future risk of agricultural crop production under climate and social changes scenarios: A case of the Solo River basin in Indonesia. *Journal of Flood Risk Management*, 18(1), e13052. <https://doi.org/10.1111/jfr3.13052>
5. Tedla, M. G., Cho, Y., & Rasmy, M. (2025). Exploring the dynamics of flood and drought hazards and adaptation strategies in the horn of Africa. *Water International*, 1–10. <https://doi.org/10.1080/02508060.2025.2463797>
6. Tamakawa, K.; Nakamura, S.; Nyunt, C.T.; Ushiyama, T.; Rasmy, M.; Kubota, K.; Naseer, A.; Ikoma, E.; Nemoto, T.; Kitsuregawa, M.; et al. Investigation of an Ensemble Inflow-Prediction System for Upstream Reservoirs in Sai River, Japan. *Water* 2024, 16, 2577. <https://doi.org/10.3390/w16182577>
7. Abdul Wahid Mohamed Rasmy, Maksym Gusyev, Katsunori Tamakawa, Miho Ohara, and Toshio Koike: Developing a flood monitoring system by utilizing real-time satellite rainfall estimates and water energy budget-based rainfall-runoff inundation model in West Africa, *Proc. IAHS*, 386, 265–270, <https://doi.org/10.5194/piahs-386-265-2024>, 2024, Publication date: 07 May 2024
8. Badri Bhakta Shrestha, Mohamed Rasmy, Tomoki Ushiyama, Ralph Allen Acierto, Takatoshi Kawamoto, Masakazu Fujikane, Hiroyuki Ito, and Takafumi Shinya: Assessment of flood damage to agricultural crops under climate change scenarios using MRI-AGCM outputs in the Solo River basin of Indonesia, *Proc. IAHS*, 386, 127–132, <https://doi.org/10.5194/piahs-386-127-2024>, 2024, Publication date: 19 Apr 2024

9. Muhammad Masood and Abdul Wahid Mohamed Rasmy: Necessary storage for managing early flash flood to save crops in the north-eastern region of Bangladesh, Proc. IAHS, 386, 27–32, <https://doi.org/10.5194/piahs-386-27-2024>, 2024, Publication date: 19 Apr 2024
10. Mihretab G. Tedla, Mohamed Rasmy, Toshio Koike, and Li Zhou: Evaluation of satellite precipitation products for real-time extreme river flow modeling in data scarce regions, Proc. IAHS, 386, 223–228, <https://doi.org/10.5194/piahs-386-223-2024>, 2024, Publication date: 19 Apr 2024
11. Jayasekara, S.; Ushiyama, T.; Rasmy, M.; Kamae, Y. Investigation of Tropical Cyclones in the North Indian Ocean and the Linkage to Extreme Weather Events over Sri Lanka. Atmosphere 2024, 15, 390. <https://doi.org/10.3390/atmos15040390>, Published 22 March 2024
12. Badri Bhakta SHRESTHA, Mohamed RASMY, Takafumi SHINYA: ASSESSMENT OF FLOOD DAMAGE TO RESIDENTIAL HOUSES AND ANALYSIS OF EFFECTIVENESS OF FLOOD DAMAGE REDUCTION MEASURES, 2024 Volume 12 Issue 2 Article ID: 23-16158, Publication date February 29, 2024
13. Ballaran, V., Jr.; Ohara, M.; Rasmy, M.; Homma, K.; Aida, K.; Hosonuma, K. Improving the Estimation of Rice Crop Damage from Flooding Events Using Open-Source Satellite Data and UAV Image Data. AgriEngineering 2024, 6, 574-596. Publication date: 4 March 2024, <https://doi.org/10.3390/agriengineering6010035>
14. Roshan Indika Jayasinghe, Mohamed Rsamy, Toshio Koike: Significance of Having Integrated Water Resource Plan in a Complex Watershed System for Better Water Management during Covid Pandemic: The Case of Mahaweli River Basin, Special issue: ICFM9 – River Basin Disaster Resilience and Sustainability by All
15. Akshay Kowlessar, Mohamed Rsamy, Toshio Koike: Developing an Integrated Flood Management Plan under climate change for Grand River North West River basin, Mauritius, Special issue: ICFM9 – River Basin Disaster Resilience and Sustainability by All
16. Jayasekara, S.; Ushiyama, T.; Rasmy, M.; Kamae, Y. Investigation of Tropical Cyclones in the North Indian Ocean and the Linkage to Extreme Weather Events over Sri Lanka. Atmosphere 2024, 15, 390. <https://doi.org/10.3390/atmos15040390>
17. Hasan, M.K.; Rasmy, M.; Koike, T.; Tamakawa, K. An Integrated Approach for the Climate Change Impact Assessment on the Water Resources in the Sangu River Basin, Bangladesh, under Coupled-Model Inter-Comparison Project Phase 5. Water 2024, 16, 745. <https://doi.org/10.3390/w16050745>
18. Vicente, Jr. BALLARAN, Miho OHARA, Mohamed RASMY, Tomoki USHIYAMA, Ralph Allen ACIERTO, Climate Change Effect on Discharge And Lake Level of Pasig-Marikina River And Laguna Lake Basin Using Dynamically Downscaled MRI-AGCM 3.2s Global Climate Model Output in a Hydrological Model, 2024, 30, p.429-434, 024/09/27, https://doi.org/10.11532/river.30.0_429,

19. B. B. Shrestha, M. Rasmy, and T. Shinya, "Assessment of Flood Damage To Residential Houses and Analysis of Effectiveness of Flood Damage Reduction Measures," J. Japan Soc. Civ. Eng., vol. 12, no. 2, pp. 1-6, 2024, doi: 10.2208/journalofjsce.23-16158.
20. Sanjeeva Illangasingha, Toshio Koike, Mohamed Rasmy, Katsunori Tamakawa, Hirotada Matsuki, Hemakanth Selvarajah, A holistic approach for using global climate model (GCM) outputs in decision making, Journal of Hydrology, Volume 626, Part B, 2023, 130213, ISSN 0022-1694, <https://doi.org/10.1016/j.jhydrol.2023.130213>.
21. M Rasmy, M Yasukawa, T Ushiyama, K Tamakawa, K Aida, and el al.,: Investigations of Multi-Platform Data for Developing an Integrated Flood Information System in the Kalu River Basin, Sri Lanka, Water, 15(6), 1199, 2023, <https://doi.org/10.3390/w15061199>
22. Tedla, M.G.; Rasmy, M.; Tamakawa, K.; Selvarajah, H.; Koike, T. Assessment of Climate Change Impacts for Balancing Transboundary Water Resources Development in the Blue Nile Basin. Sustainability 2022, 14, 15438. <https://doi.org/10.3390/su142215438>
23. Khairul, I.M.; Rasmy, M.; Ohara, M.; Takeuchi, K. Developing Flood Vulnerability Functions through Questionnaire Survey for Flood Risk Assessments in the Meghna Basin, Bangladesh. Water 2022, 14, 369. <https://doi.org/10.3390/w14030369>
24. Miyamoto, M.; Kakinuma, D.; Ushiyama, T.; Rasmy, A.W.M.; Yasukawa, M.; Bacaltos, D.G.; Sales, A.C.; Koike, T.; Kitsuregawa, M. Co-Design for Enhancing Flood Resilience in Davao City, Philippines. Water 2022, 14, 978. <https://doi.org/10.3390/w14060978>
25. Li Zhou, Toshio Koike, Kuniyoshi Takeuchi, Mohamed Rasmy, Katsuhiro Onuma, Hiroyuki Ito, Hemakanth Selvarajah, Lingxue Liu, Xiaodong Li, Tianqi Ao: A Study on Availability of Ground Observations and Its Impacts on Bias Correction of Satellite Precipitation Products and Hydrologic Simulation Efficiency, Journal of Hydrology, 2022, 127595,ISSN 0022-1694,<https://doi.org/10.1016/j.jhydrol.2022.127595>.
26. Wang L, Song C, Conradt T, Rasmy M and Li X (2021) Editorial: Climatic and Associated Cryospheric and Hydrospheric Changes on the Third Pole. Front. Earth Sci. 8:638371. doi: 10.3389/feart.2020.638371
27. Zhou, L.; Rasmy, M.; Takeuchi, K.; Koike, T.; Selvarajah, H.; Ao, T. Adequacy of Near Real-Time Satellite Precipitation Products in Driving Flood Discharge Simulation in the Fuji River Basin, Japan. Appl. Sci. 2021, 11, 1087. <https://doi.org/10.3390/app11031087>
28. Selvarajah, H.; Koike, T.; Rasmy, M.; Tamakawa, K.; Yamamoto, A.; Kitsuregawa, M.; Zhou, L. Development of an Integrated Approach for the Assessment of Climate Change Impacts on the Hydro-Meteorological Characteristics of the Mahaweli River Basin, Sri Lanka. Water 2021, 13, 1218. <https://doi.org/10.3390/w13091218>

29. Mohamed Rasmy, Takahiro Sayama, and Toshio Koike, Development of water and energy Budget-based Rainfall-Runoff-Inundation model (WEB-RRI) and its verification in the Kalu and Mundeni River Basins, Sri Lanka, *Journal of Hydrology*, 579, 2019, <https://doi.org/10.1016/j.jhydrol.2019.124163>
30. Asif Naseer, Toshio Koike, Mohamad Rasmy, Tomoki Ushiyama, Maheswor Shrestha, Distributed Hydrological Modeling Framework for Quantitative and Spatial Bias Correction for Rainfall, Snowfall, and Mixed-Phase Precipitation Using Vertical Profile of Temperature, *JGR Atmosphere*, 124(9), 2019, <https://doi.org/10.1029/2018JD029811>
31. M. Nikolaos, B. Bhattacharya, Y. Shibuo, M. Rasmy, G. Espinoza-Dávalos, D. Solomatine, Evaluating the benefits of merging Near Real-Time Satellite Precipitation Products: A Case Study in the Kinu Basin Region, Japan, *JHM*, 20, 1213-1233, 2019, <https://doi.org/10.1175/JHM-D-18-0190.1>
32. Khairul, I.M.; Mastrantonas, N.; Rasmy, M.; Koike, T.; Takeuchi, K. Inter-Comparison of Gauge-Corrected Global Satellite Rainfall Estimates and Their Applicability for Effective Water Resource Management in a Transboundary River Basin: The Case of the Meghna River Basin. *Remote Sens.* 2018, 10, 828.
33. M.H. Mahtab, Mino Ohara, Mohamed Rasmy, Effectiveness of the Submersible Embankment in Haor Area in Bangladesh, *Journal of Disaster Management*, 13(4), 2018, <https://doi.org/10.20965/jdr.2018.p0780>
34. Mohamed RASMY, and co-authors: Preliminary Investigation of Water and Energy based Rainfall-Runoff-Inundation (WEB-RRI) Model in the Lower Kinu River Basin, Japan, Annual meeting of japan society of hydrology and water resources, Oct. 2016.
35. Seto, R., T. Koike, and M. Rasmy: Heavy rainfall prediction applying satellite-based cloud data assimilation over land, *Journal of Geophysical Research: Atmospheres* 121 (16), 9737-9755, 2016
36. Sawada, Y., H. Tsutsui, T. Koike, M. Rasmy, R. Seto, and H. Fujii: A Field-Supported Algorithm to Retrieve Vegetation Water Content from Passive Microwave Observations *Geoscience and Remote Sensing, IEEE Transactions on*, 54 (4), 2082-2095, 2016
37. Rasmy, M., T. Koike, P. Lawfort, M. Hara, M.Fujita, and F. Kimura: Assessment of future water resources in the Tone river basin using a combined dynamical-statistical downscaling approach. *Annual Journal of Hydraulic Engineering, JSCE.59*, 2015.
38. Acierto, R.A., T. Koike, and M. Rasmy.: Sensitivity of single-year seasonal precipitation to parameterization in the WRF model, *Annual Journal of Hydraulic Engineering, JSCE.59*, 2015.

39. Rasmy, M., T. Koike, X. Li, and K. Yang: Application of multi-frequency passive microwave observations and data assimilation methods for enhancing numerical weather forecast in Niger, Africa. *Remote Sens.* 2014, 6(6), 5306-5324; DOI:10.3390/rs6065306
40. Rasmy, M., M. Shrestha, T. Koike, M. Hara, M. Fujita, and F. Kimura: a combined dynamical/statistical downscaling approach for assessing future of water resources in the Tone river basin, Japan. *Annual Journal of Hydraulic Engineering, JSCE.*58, 2014.
41. Bhatti A. M., Toshio Koike, Sanchez P. J., Rasmy M., Yoshimura K., Bashir A.: Climate change impact assessment on the hydrology of a semi-arid river basin, *Journal of Hydraulic Engineering, JSCE*, Vol.58, 2014.
42. SETO, R., T. Koike, and M. Rasmy: Analysis of the vertical structure of the atmospheric heating process and its seasonal variation over the Tibetan Plateau using a land data assimilation system, *Journal of Geophysical Research*, Volume 118, Issue 22, pages 12,403–12,421, 27 November 2013, DOI: 10.1002/2013JD020072
43. Mutua, F., T. Koike, and M. Rasmy: Sensitivity Analysis of Microwave Atmosphere-Land Data Assimilation System over Lake Victoria Basin, *IEEE Transactions on Geoscience and Remote Sensing (TGRS)*, under revision, 2013.
44. Rasmy, M., C.T. Tanda, P.A.J. Sanchez, T. Koike, M. Hara, M. Fujita, and H. KAWASE: Identifying gaps and opportunities between statistical and dynamical downscaling approaches over Shikoku Island, Japan. *Annual Journal of Hydraulic Engineering, JSCE.*57, 2013 (Best International Research Paper)
45. Mutua, F., M. Rasmy, and T. Koike: Improving extreme rainfall event prediction using microwave satellite data assimilation, *Annual Journal of Hydraulic Engineering, JSCE.*57, 2013
46. Sanchez, P.A.J., C.T. Tanda, M. Rasmy, I. Hasegawa, A. Matsumura, D. Ogawada, T. Wakabayashi, and T. Koike: Hydrological impacts of a changing climate on floods and droughts in Philippine river basins, *Annual Journal of Hydraulic Engineering, JSCE.*57, 2013.
47. Sato, R., T. Koike and M. Rasmy: A Study On Convection And Atmospheric Heating Process Over The Tibetan Plateau By Using A Land Data Assimilation System, *Journal of Japan Society of Civil Engineers, Ser.~B1 (Hydraulic Engineering)*, Vol. 67, pp-319, 2012, DOI: 10.2208/jscejhe.67.I_319
48. Rasmy, M., T. Koike, D. N. Kuria, C. R. MIRZA, X. Li, and K. Yang: 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, 2012, DOI: 10.1109/TGRS.2012.2190517
49. Lu, H., T. Koike, K. Yang, Z. Hu, X. Xu, M. Rasmy, D. Kuria, K. 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, *International Journal of Applied Earth Observation and Geoinformation*, Vol (17), pp. 43-54, 2011, DOI: 10.1016/j.jag.2011.09.006.
 50. Rasmy, M., T. Koike, S. Boussetta, H. Lu, and X. Li: Development of a Satellite Land Data Assimilation System Coupled With a Mesoscale Model in the Tibetan Plateau, *IEEE Transactions on Geosciences and Remote Sensing*, Vol. 49(8), pp 2847-2862, 2011, DOI: 10.1109/TGRS.2011.2112667
 51. Rasmy, M., T. Koike, H. Lu, X. Xu, S. Boussetta, and X. Li: Development of a satellite based sequential land data assimilation system coupled with a regional-scale atmospheric model. *Annual Journal of Hydraulic Engineering, JSCE*.54, 49-54, 2010.
 52. 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, *Annual Journal of Hydraulics Engineering, JSCE*, Vol. 54, pp. 61-66, 2010.
 53. Rasmy, M., S. Rauniyar, T. Koike, K. Taniguchi, K. Tamagawa, and K. Yang: Assessment of energy budget in weather forecasting general circulation models. *Annual Journal of Hydraulic Engineering, JSCE*. 51, 1-6, 2007
 54. Yang, K., M. Rasmy, S. Rauniyar et al.: Initial CEOP-based review of prediction skill of operational general circulation models and land surface models, *Journal of the Meteorological Society of Japan*, 85A, 99-116, 2007

(b) Japanese

1. H Tsutsui, R Mohamed, T Koike: 湯水によるパナマ運河水位低下の緩和対策に関する基礎研究, *土木学会論文集 B1 (水工学)(Web)*, 78, 2, 745-750, 2022
2. 中村 茂, 小池 俊雄, Cho Thanda Nyunt, 牛山 朋來, Mohamed Rasmy, 玉川 勝徳, 伊藤 弘之, 池内 幸司, 生駒 栄司, 喜連川 優, 長期・短期アンサンブル予測を組み合わせた発電ダムの操作支援システム, *土木学会論文集 B1 (水工学)*, 2022, 78 巻, 2 号, p. I_1195-I_1200, 公開日 2023/01/25, Online ISSN 2185-467X, https://doi.org/10.2208/jscejhe.78.2_I_1195,
https://www.jstage.jst.go.jp/article/jscejhe/78/2/78_I_1195/_article/-char/ja

3. 小池 俊雄, 中村 茂, Cho Thanda Nyunt, 牛山 朋來, Rasmy Mohamed, 玉川 勝徳, 伊藤 弘之, 池内 幸司, 生駒 栄司, 喜連川 優, 発電ダムの洪水調節と発電操作支援システム, 土木学会論文集 B1(水工学), 2021, 77 巻, 2 号, p. I_79-I_84, 公開日 2022/02/15, Online ISSN 2185-467X, https://doi.org/10.2208/jscejhe.77.2_I_79, https://www.jstage.jst.go.jp/article/jscejhe/77/2/77_I_79/_article/-char/ja,
4. 玉川勝徳・Mohamed RASMY・小池俊雄：水域と灌漑域を考慮したカンボジアにおける AMSR2 輝度温度補正と土壤水分推定改善手法の検討, 水工学論文集 第 62 巻, pp. I_271-I_276, 2018 年 2 月.
5. 玉川勝徳・Mohamed RASMY・小池俊雄・辻本久美子・会田健太郎・藤井秀幸・増本隆夫：陸面データ同化手法を用いたカンボジア・プルサット観測点での土壤水分推定手法の検討, 水工学論文集 第 59 巻, pp. I_409- I_414, 2015 年 2 月.
6. 瀬戸里枝・小池俊雄・Mohamed RASMY: WRF を結合した陸面・雲の衛星データ同化システムの開発と関東域への適用, 水工学論文集 第 58 巻, pp. I_535-I_540, February 2014.
7. 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 第 57 巻, ppI_1789-I_1794, 2013 年 2 月.
8. 瀬戸里枝・小池俊雄・Mohamed RASMY, 陸面データ同化を用いたチベット高原での対流の挙動と大気加熱プロセスに関する研究, 水工学論文集 第 55 巻, pp319-324, 2011 年 2 月.

Non-Peer-reviewed Journal Publications

1. Yang, K., M. Rasmy, S. Rauniyar, T. Koike, 2006: Inter-comparisons of Prediction Skill of Operational GCMs and a Land Data Assimilation System CEOP Newsletter 10, 3-5.
2. Abdul Wahid Mohamed Rasmy、牛山朋來、安川雅紀、深見和彦、観測情報の乏しい発展途上国で運用可能な洪水予測システムの開発 ～全球規模の衛星降雨観測・降雨予測情報の活用～、土木技術資料、第 62 巻、pp. 12-17、令和 2 年 2 月号

Books and Book Chapters

1. Challenges and Technical Advances in Flood Early Warning Systems (FEWSs), Duminda PereraOusmane SeidouOusmane SeidouJetal AgnihotriJetal AgnihotriShow Abdul Wahid Mohamed Rasmy, Flood Impact Mitigation and Resilience Enhancement, IntechOpen, June 2020, DOI: 10.5772/intechopen.93069

2. Flood Early Warning Systems: A Review Of Benefits, Challenges And Prospects, Duminda Perera, Ousmane Seidou, Jetal Agnihotri, Mohamed Rasmy, Vladimir Smakhtin, Paulin Coulibaly, Hamid Mehmood, UNU-INWEH Report Series, Issue 08, 2019, United Nations University Institute for Water, Environment and Health, Hamilton, Canada.

Poster Presentation

1. Rasmy, M., .T. Koike, M. Hara, M. Fujita, and F. Kimura, 2013: A projection of future changes in precipitation over Sri Lanka using pseudo global warming downscaling approach, Internatinal Conference on Regional Climate – WCRP-CORDEX-2013, Brussels, Belgium. (Best Poster Award).
2. Seto, R., M. Rasmy, and T. Koike 2012: Development of a WRF and SiB2 based satellite land data assimilation system, AGU Fall meeting 2012, ED13C-0078, San Francisco, USA
3. Mutua, F., T. Koike, and M. Rasmy, 2012: Improving extreme rainfall event prediction using microwave satellite data assimilation and bogus wind modification, AGU Fall meeting 2012, ED13C-0078, San Francisco, USA
4. M. Rasmy, T. Koike, and H. Lu, 2012: 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.
5. 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.
6. Rasmy, M., K. Yang, and T. Koike, 2006: CEOP-based Diagnosis of Prediction Skill of Current Operational General Circulation Models. The Earth System Science Partnership Global Environmental Change Open Science Conference (ESSP-OSC) held in Beijing, China.
7. Kun Yang, Mohamed Rasmy, Surendra Rauniyar, Toshio Koike, 2006: CEOP-based Diagnosis of Prediction Skill of Current Operational General Circulation Models and Land Data Assimilation Systems. 5th International Implementation Planning Meeting for the Coordinated Enhanced Observing Period (CEOP) and 2nd Integrated Global Observing Strategy Partners (IGOS-P) Integrated Global Water Cycle Observation Theme (IGWCO) Workshop in Paris, France.

8. Mohamed Rasmy, Yuichi Iwami, Tomoki Ushiyama, Toshio koike, Applications of Global Satellite Mapping of Precipitation (GSMaP) Products for Enhancing Flood Forecasting and Early Warning Activities in Sri Lanka, Asia Oceania Geosciences Society (AOGS), Singapore, August 6-11, 2017
9. Islam M. Khairul, Nikolaos Mastrantonas, Mohamed Rasmy, Toshio Koike and Kuniyoshi Takeuchi, Inter-comparison of gauge-adjusted global satellite rainfall estimates for water resources management in the Maghna river basin, JpGU-AGU Joint Meeting, Chiba, May 20-24th, 2018, Japan
10. Abdul Wahid Mohamed Rasmy, KOIKE Toshio, Incorporating Evapotranspiration Processes in the Rainfall-Runoff-Inundation (RRI) Model and validating the model outputs with the MODIS and GLEAM Evapotranspiration Products, AMS Annual meeting, AMS, Boston, USA, January 12-16, 2020

Thesis Supervision

- (a) PhD Thesis

Main-

1. Developing a Methodology for Integrated Flood Risk Assessment in a Transboundary River Basin Using Multi-Platform Data Under Global Change– the Case of the Meghna River Basin (http://www.grips.ac.jp/en/dttds3/md_khairul_islam/)
2. A Study on an Integrated Water Resources Management Practice for Sustainable Transboundary River Basin Development: The Case of the Blue Nile Basin https://grips.repo.nii.ac.jp/record/2000047/files/k280_report_doc20132_rev.pdf

Co-supervised

1. Assessment of Selected Strategies to Increase Economic Benefits in Haor Areas in Bangladesh, by Mahtab Mohammad Hossain, GRIPS, 2018 (http://www.grips.ac.jp/en/dttds3/mahtab_mohammad_hossain/)
2. Development of a near-real time flood inundation analysis system for a deltaic flat river

basin in a data-scarce region; Case of the Bago River basin, Myanmar, by Seemanta Sharma BHAGABATI, The University of Tokyo, 2018

3. Development of an integrated hydrological modeling framework in mountainous areas including rainfall and snowfall quantification derived from data integration by by Mahtab Asif Nasheer, GRIPS, 2018 (http://www.grips.ac.jp/en/dttds3/asif_naseer/)
4. A study on climate change adaptation and resilience strategies for optimizing benefits of the Mahaweli River Basin in Sri Lanka https://grips.repo.nii.ac.jp/record/1856/files/k247_report_doc18131.pdf
5. Integrated Operation of Reservoirs for Maximizing Hydropower and Reducing Flood Risk https://grips.repo.nii.ac.jp/record/1857/files/k248_summary_doc18132.pdf
6. A holistic analysis system to support water resource policy decisions under climate change (2023/2024)

(b) Master Thesis

Main-

1. DEVELOPMENT OF A FLOOD FORECASTING AND DATA DISSEMINATION SYSTEM FOR KALU RIVER BASIN IN SRI LANKA , by Sinnappoo Kokularamanan, GRIPS (<http://www.icharm.pwri.go.jp/training/master/img/2016/synopses/mee15633.pdf>)
2. INCORPORATION OF SNOW AND GLACIER MELT PROCESSES IN RRI MODEL FOR ESTIMATING PEAK RIVER DISCHARGES AND INUNDATION ANALYSIS IN NEELUM RIVER BASIN, by Irfan Ullah Khan (<http://www.icharm.pwri.go.jp/training/master/img/2016/synopses/mee15629.pdf>)
3. Investigating the Impact of Climate Change on Flooding in the Sittaung River Basin, Myanmar, by Ms. Su Su Kyi (http://www.grips.ac.jp/cms/wp-content/uploads/2018/02/MEE16730_Su-Su-Kyi.pdf)
4. INVESTIGATION OF HYDROLOGICAL RESPONSE OF FLOOD CONTROL SCENARIOS AND ASSESSMENT OF THE EFFECTIVENESS IN COMORO RIVER BASIN DILI, TIMOR-LESTE, by Ms. Letigia Dos Reis Hanjan Corbafo (http://www.grips.ac.jp/cms/wp-content/uploads/2018/02/MEE16726_Letigia-Dos-Reis-Hanjan-Corbafo.pdf)
5. Integrated Water Resources Management for Eastern Dry Zone of Sri Lanka Study of Mundani River Basin, by Babarande Guruge Thanura Lasantha, GRIPS (<http://www.icharm.pwri.go.jp/training/master/img/2016/synopses/mee15623.pdf>)

6. DEVELOPMENT OF AN INTEGRATED RESEARCH METHOD FOR EFFECTIVE WATER RESOURCE MANAGEMENT IN A COMPLEX WATERSHED SYSTEM: THE CASE OF MAHAWELI RIVER BASIN ,by Mr. JAYASINGHE Roshan Indika (http://www.grips.ac.jp/cms/wp-content/uploads/2019/02/MEE17729_Jayasinghe-Roshan-Indika.pdf)
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