List of Publications

The following articles arranged in each research field were published by our faculty members during April 2019 to March 2020. Our department and/or research groups also published the following publications.

- 1) Annals of Human and Regional Geography, 42 (2020)
- 2) Studies in Human Geography, 40 (2020)

The exchanges of the publications will be gratefully acknowledged.

[Symbols]

J in Japanese

JE in Japanese with English abstract

- The first author
- * Researchers belonging to University of Tsukuba, not to the Doctoral Program in Geoenvironmental Sciences
- ** Researchers not belonging to University of
 Tsukuba
- *** Undergraduate students, graduate students and auditors belonging to University of Tsukuba

[a] Human Geography

- Akiyama, C. (2020): Process of tourism resources at riverside district in Itako city, Ibaraki prefecture, Japan. *Annals of Human and Regional Geography*, **42**, 93-108. (*J*, with Sakamoto, Y. **, Matsuyama, S. ***, Guo, Q. ***, Zou, S. ***, Obara, Y. ***, Kano, S. ***, Huang, T. *** and Ito, D. **)
- Kubo, T. (2020): Divided Tokyo- disparities in living conditions in the city center and the shrinking suburbs (AJG Library 11). Springer Singapore.
 - (2020): Housing supply and residential choice of residents of newly built detached houses in the suburbs of the Nagoya metropolitan area -a case study of Kani city, Gifu prefecture. *Annals of the Japan Society for Urbanology*, **52**, 131-140. (*J*, with Otsuka, T.**)
- (2020): Older adults' residential environments in suburban neighborhoods in Gifu city challenges in enabling age-friendly city. *Urban Geography of Japan*, **15**, 76-90. (*JE*, with Komaki, N.** and Tanaka, K.**)
- (2019): A review of "Neoliberal urbanism, contested cities and housing in Asia", Edited by Yi-Ling Chen and Hyun Bang Shin. *International Journal of Housing Policy*, **19**(4), 601-603.

Matsui, K. (2020): Changes of the Commercial Structure

- in Kashima City, Ibaraki Prefecture. *Ann. Hum. and Reg. Geogr.*, **42**, 1-29. (*J*, with Iwai, Y. ****, Ebisawa, H. ****, Murakami, R. ****, Oshimi, T. ****, Kobayashi, T. ****, Zhou, Y. ****, Hirane, Y. ****, He, D. **** and Mo, Y. ****)

 ______ (2020): Development and Maintenance of Kashima Coastal Industrial Zone from the Viewpoint of Regional Policy and Positioning Strategy of Company. *Ann. Hum. and Reg. Geogr.*, **42**, 59-76. (*J*, with Kawazoe, W. ****, Hirasawa, K. ****, Jian, M. ****, Hashizume, A. **** and Ji, Y. ****)
- in Provincial City: A Case Study of Parishinoner's Area in Kashima-jingu Shrine. *Ann. Hum. and Reg. Geogr.*, **42**, 109-131. (*J*, with Haga, M ****. Sato, D. ***, Wakamatsu, H. ***, Wan, J. ***, Ma, S. ***, Guo, S. ***, Kiba, K. ** and Uda, T. *)
- (2020): Preface. Ann. Hum. and Reg. Geogr., **42**, i-ii. (*J*)
- (2019): Book review: Martin, F.P. *Mountain*, trans. By Watanabe, T. and Ueno, K. Maruzen. *Jour. Geogr.*, **128**, N4-N6. (*J*)
- (2019): Environmental Perception, Image and Place. *In*: Matsuoka, N., Tanaka, H., Sugita, N., Hattanji, T., Matsui, K., Kureha, M. and Kato, H. (eds.). *Geoenvironmental Sciences, Revised Edi.* (Geoscience Series 1) Kokon Shoin, 63-70. (*J*, with Kubo, T.)
- Sakamoto, Y. (2020): Night and Landscape: Invisible Night and Experienced Darkness. *Geographical Space*, **12**, 207-226. (*JE*, with Ikeda, M. **, Nakagawa, S. ***, Ota, K. **, Sugimoto, K. ** and Uda, T. **)
- (2020): Analysis of commercial areas in terms of restaurants agglomeration and business hours: Comparison among nightlife in Shinjuku, Ginza, and Shibuya. *Geographical Space*, **12**, 227-245. (*JE*, with Sugimoto, K. ***, Ota, K. ***, Iizuka, R. *** and Ikeda, M. *)
- (2020): Characteristics of mountain tourism in snow-free season in Hakuba Area, Nagano Prefecture: Based on visitor analysis in mountain resort. *Studies in Human Geography*, **40**, 1-14. (*J*, with Yoshizawa, N.***, Kureha, M., Yamashita, A. and Sato, D.***)
 - (2020): Process of tourism resources at riverside district in Itako city, Ibaraki prefecture, Japan. *Annals of Human and Regional Geography*, **42**, 93-108. (*J*, with Matsuyama, S.***, Guo, Q. ****, Zou, S. ****, Obara, Y. ****, Kano, S. ****, Huang, T. ****, Ito, D. ***

and Akiyama, C.)

(2020): Visualizing culture. GIS NEXT, **70**, 68.

[b] Regional Geography

- Kureha, M. (2019): Development of winter inbound tourism in Yuzawa, Niigata: An analysis from the interview to Chinese tourists visited ski areas. *Journal of Ski Science*, **16**(1), 1-11. (*JE*, with Yoshizawa, N. ****)
- (2019): Rural area and tourism, Resort, and Skiing. *In* Shirasaka, S. *et al.* eds., *Encyclopedia of Tourism*. Asakura Shoten, 280-281, 290-291, 307-308. (*J*)
- (2020): Characteristics of mountain tourism in snow-free season in Hakuba Area, Nagano Prefecture: Based on visitor analysis in mountain resort. *Studies in Human Geography*, **40**, 1-14. (*J*, with Sakamoto, Y.°, Yoshizawa, N.***, Yamashita, A. and Sato, D.***)
- (2020): Ski area and rural mountainous region.

 In Inui, T. eds., Geographical Recognition in Japanese Rural Areas with Fieldwork. Kokon Shoin, 92-109. (J)
- Tsutsumi, J. (2019): Chapter 9: Australia -Regional geography focusing on multiculturalism-. *In* Yagasaki, N., Kagami, M. and Ushigaki, Y. eds. *Introduction to Regional Geography 2nd Edition Basic Geography Series*, Asakura Shoten, Tokyo, 82-91. (*J*)
- (2020): Chapter 8: Melbourne in Australia Intensification of urban functions in accordance with rapid population growth-. *In* Taniguchi, M. ed. *Compact city in the world Mechanism and effect of smart shrinking cities*, Gakugei Shuppan, Kyoto, 216-248. (*J*)
- Yamashita, A. (2019): Changes in store composition in central commercial areas of a local city in South Korea: A case study of Yangsan city in Busan metropolitan area. *Urban Geography of Japan*, **14**, 76-88. (*J*, with Kaneko, J.**, Yamamoto, T.**, Hashimoto, A.**, Lee, H.**, Komaki, N.** and Jeon, J.**)
- (2020): Characteristics of mountain tourism in snow-free season in Hakuba Area, Nagano Prefecture: Based on visitor analysis in mountain resort. *Studies in Human Geography*, **40**, 1-14. (*J*, with Sakamoto, Y.°, Yoshizawa, N.***, Kureha, M. and Sato, D.***)
- _____ (2020): Creating land use mesh data based on Japanese military maps in Hanoi, French Indochina. *Studies in Human Geography*, **40**, 15-24. (*J*, with Oshimi, T.***, Obara, Y.*** and Sasaki, R.***)

[c] Spatial Information Science

- Kusaka, H. (2019): The "Karakkaze" Local Wind as a Convexity Wind: A Case Study using Dual-Sonde Observations and Numerical Simulations. *SOLA*, **15**, 160-165. DOI: https://doi.org/10.2151/sola.2019-029. (with Nishi, A. ****)
- (2019) A climatological study of the strongest local winds of Japan "Inami-kaze". *International Journal of Climatology*, **40**, 1007-1021. DOI: 10.1002/joc.6252 (with Koyanagi, T. ***)
 - (2019): Impacts of Land Use and Human Activity on Spatial-Pattern Characteristics of Temperature and Heat Index in Central Area of City. *E-Journal GEO*, **14**(1), 180-196. DOI: https://doi.org/10.4157/ejgeo.14.180. (*JE*, with Igari, K.**, Kokubo, R.**, Sato, T.***, Doan, V. Q.**)
 - "Karakkaze" Wind, with a Focus on Temperature Change. *SOLA*, **15**, 149-153. DOI: https://doi.org/10.2151/sola.2019-027 (with Nishi, A.****)
 - (2019): Usability and Challenges of Offshore Wind Energy in Vietnam Revealed by the Regional Climate Model Simulation. *SOLA*, **15**, 113-118.DOI: 10.2151/sola.2019-021 (with Doan, Q. V. ***, Dinh, V. N. ***, Cong,T. ***, Khan, A. ***, Toan, D. V. *** and Duc, N. D. ***)
- [2019]: Contributions of Foehn and Urban Heat Island to the Extreme High-Temperature Event in Niigata City during the Night of 23–24 August 2018. SOLA, 15, 132-136. DOI: https://doi.org/10.2151/sola.2019-024 (with Nishi, A.****,

Vitanova, L. L. ** and Imai, Y. ***)

- (2019): Roles of past, present, and future land use and anthropogenic heat release changes on urban heat island effects in Hanoi, Vietnam: Numerical experiments with a regional climate model. Sustainable Cities and Society, 47, DOI: 10.1016/j.scs.2019.101479 (with Doan, V. Q. and Nguyen, T. M.**)
- (2019): Interaction of urban heat islands and heat waves under current and future climate conditions and their mitigation using green and cool roofs in New York City and Phoenix, Arizona. *Environmental Research Letters*, **14**, DOI: 10.1088/1748-9326/aaf431 (with Tewari, M. ***, Yang, J. ***, Salamanca, F. ***, Watson, C. *** and Treinish, L. **)
- (2019): Development of a multilayer urban canopy model combined with a ray tracing algorithm. *SOLA*, **15**, 37-40. DOI: 10.2151/sola.2019-008 (with Doan, V. O.***)
- (2019): Numerical Study of the Urban Heat Is-

land in Sendai City with Potential Natural Vegetation and the 1850s and 2000s Land-Use Data. *Journal of the Meteorological Society of Japan*, **97**(1), 227-252. DOI: 10.2151/jmsj.2019-013 (with Vitanova, L. L.****, Doan, V. Q.*** and Nishi, A.****)

(2019): Comparison of Spatial Pattern and Mechanism between Convexity and Gap Winds. *SOLA*, **15**, 12-16. DOI: 10.2151/sola.2019-003 (with Nishi, A.****)

(2019): Effect of Foehn Wind on Record-Breaking High Temperature Event (41.1 degrees C) at Kumagaya on 23 July 2018. *SOLA*, **15**, 17-21. DOI: 10.2151/sola.2019-004 (with Nishi, A.

(2019): Simulating micro-scale thermal interactions in different building environments for mitigating urban heat islands. *Science of the Total Environment*, **663**, 610-631. DOI: 10.1016/j.scitotenv.2019.01.299 (with Chatterjee, S. ***, Khan, A. **, Dinda, A. ***, Mithun, S. ***, Khatun, R. ***, Akbari,H. ***, Mitra,C. ***, Bhatti, S. S. ***, Doan, V. Q. *** and Wang, Y. ***)

(2019): Application of mesoscale ensemble forecast method for prediction of wind speed ramps. *Wind Energy*, **22**(4), 499-508. DOI: 10.1002/we.2302 (with Doan, V. Q.***, Matsueda. M.* and Ikeda. R.*)

(2019): Numerical approach for studying offshore wind power potential along the southern coast of Vietnam. *Lecture Notes in Civil Engineering*, **18**, 245-249. DOI: 10.1007/978-981-13-2306-5_33 (with Doan, V. Q. °, Du, T. V.**, Nguyen, D. D.** and Cong, T.**)

(2019): Impacts of urban expansion on fog types in Shanghai, China: numerical experiments by WRF model. *Atmospheric Research*, **220**, 57-74. DOI: 10.1016/j.atmosres.2018.12.026 (with Gu, Y.***, Doan, V. Q. and Tan, J.***)

(2019): Effect of mountain convexity on the locally strong "Karakkaze" wind. *J. Meteor. Soc. Japan*, **97**(4), 787-803. DOI: 10.2151/jmsj.2019-044 (with Nishi, A. ****)

Pattern of Short-Duration Convective Precipitation in a Coastal City Adjacent to a Mountain range. *Quart. J. Roy. Meteor. Soc.*, **145**, 2237-2254. DOI: 10.1002/qj.3555 (with Nishi, A.***, Mizunari, M. ***, Yokoyama, H. **)

Morimoto, T. (2019): Impacts of Land Cover/Use on the Urban Thermal Environment: A Comparative Study of 10 Megacities in China. *Remote Sensing*, **12**(2), 307. DOI: 10.3390/rs12020307 (with Liu, F. Zhang, X ** and Murayama, Y.*)

(2020): Optimal Location Analysis of Delivery Parcel-Pickup Points Using AHP and Network Huff Model: A Case Study of Shiweitang Sub-District in Guangzhou City, China. *ISPRS Int. J. Geo-Inf.*, **9**(4), 193. DOI: 10.3390/ijgi9040193 (with Zheng, Zilai.**** and Murayama, Y*.)

(2019): Spatial Process of Surface Urban Heat Island in Rapidly Growing Seoul Metropolitan Area for Sustainable Urban Planning Using Landsat Data (1996–2017). *Climate*, 7(9), 110. DOI: 10.3390/cli7090110.(with Priyankara, P. ****, Ranagalage, M.**, Dissanayake, D. **** and Murayama, Y.*)

(2019): Impact of Landscape Structure on the Variation of Land Surface Temperature in Sub-Saharan Region: A Case Study of Addis Ababa using Landsat Data (1986–2016). *Sustainability*, **11**, 2257. DOI: 10.3390/su11082257 (with Dissanayake, D. ****, Murayama, Y. ** and Ranagalage, M. *)

(2019): Land-Use/Land-Cover Changes and Their Impact on Surface Urban Heat Islands: Case Study of Kandy City, Sri Lanka. *Climate* 7, 99. DOI: 10.3390/cli7080099. (with Dissanayake, D.****, Ranagalage, M.* and Murayama, Y.*)

[d] Hydrologic Sciences

Asanuma, J. (2019): Uncertainty of Reference Pixel Soil Moisture Averages Sampled at SMAP Core Validation Sites. *Journal of Hydrometeorology*, **20**(8), 1553-1569. (with Chen, F. ***, Crow, W.T. ***, Cosh, M.H. ***, Colliander, A. ***, Berg, A. ***, Bosch, D.D. ***, Caldwell, T.G. ***, Collins, C.H. ***, Jensen, K.H. ***, Martinez-Fernández, J. ***, McNairn, H. ***, Starks, P.J. ***, Su, Z. *** and Walker, J.P. ***)

(2019): Evaluation of the AMSR2 L2 soil moisture product of JAXA on the Mongolian Plateau over seven years (2012 - 2018). SN Applied Sciences, 1(11) Springer Science and Business Media LLC. (with Kaihotsu, I. ***, Aida, K. *** and Oyunbaatar, D. **)

Sugita, M. (2020): Spatial variability of the surface energy balance of Lake Kasumigaura and implications for flux measurements. *Hydrological Sciences Journal*, **65**, 410-414.

Tsujimura, M. (2019): Six-year monitoring study of ¹³⁷Cs discharge from headwater catchments after the Fukushima Dai-ichi Nuclear Power Plant accident. *Journal of Environmental Radioactivity*, **210**, https://doi.org/10.1016/j.jenvrad.2019.106001 (with Iwagami, S. ***, Onda, Y.*, Sakakibara, K.**, Sato, Y.***, Konuma, R.****, Nishino, M.**** and Abe, Y.*)

_____ (2019): Filtration and exposure to benzalkonium chloride or sodium chloride to preserve water samples for dissolved inorganic carbon analysis. *Geochemical Journal*, **53**, 305-318. (with Takahashi, H. ***, Handa, H. ***, Sugiyama, A. ****, Matsushita, M. ***, Kondo, M. *** and Kimura, H. **)

(2019): Groundwater age and mixing process for evaluation of radionuclide impact on water resources following the Fukushima Dai-ichi nuclear power plant accident. *Journal of Contaminant Hydrology*, **223**, https://doi.org/10.1016/j.jconhyd.2019.03.006. (with Sakakibara, K. ***, Iwagami, S. ***, Abe, Y. ***, Hada, M. **** and Pun, I. ****)

(2019): Dissolved ¹³⁷Cs concentrations in stream water and subsurface water in a forested headwater catchment after the Fukushima Dai-ichi Nuclear Power Plant accident. *Journal of hydrology*, **573**, 688-696. (with Iwagami, S.**, Onda, Y.*, Konuma, R.***, Sato, Y.***, Sakakibara, K.*** and Yoschenko, V.**)

Yamanaka, T. (2019): Hydrological cycle overlooked by isotopic tracers. *Kagaku*, **89**(8), 683-685.

[e] Atmospheric Science

- Tanaka, H. L. (2019): Numerical simulations of volcanic ash plume dispersal for Sakura-jima using real-time emission rate estimation. *Journal of Disaster Research*, **14**(1), 160-172. (with Iguchi, M.**)
- (2019): Integrated monitoring of volcanic ash and forecasting at Sakurajima volcano, Japan. *Journal of Disaster Research*, **14**(5), 798-809. (with Iguchi, M.***)
- (2019): Time series analysis of normal mode energetics for Rossby wave breaking and saturation using a simple barotropic mode. *Atmospheric Science Letters*, DOI: 10.1002/asl.940, (with Matsunobu, T.***)
- Ueda, H. (2019): Tropics-origin remote forcing on wintertime snowfall variations in Japan, *Meteorological study Note*, **240**, 105-113 (*J*, with Kibe, A.***, Saitoh, M.*** and Inoue, T.**)
- (2019): Relationship between El Niño and South-coast cyclone in Japan, *Meteorological Study Note*, **240**, 114-118. (*J*, with Amagai, Y.*** and Hayasaki, M.**)
- (2019): Variations of snowfall and sea-ice in the Northeast Asia relevant to tropical SSTs, Siberian high and Aleutian low. *The 27th IUGG General Assembly*, Montreal, Canada. (with Maesaki, K.*** and Hayasaki, M.**)
- (2019): Trans-basin interaction between the Indian and Pacific Ocean involved in the regulation of tropical SST. extended abstract, Workshop for the

- seasonal prediction. (J, with Tanji, N. ****)
- _____ (2019): On the startup of "Society of climate formation and variation." *Tenki*, **66**, 630. (*J*)
- Ueno, K. (2019): Continuous heavy precipitation with a winter occluding cyclone captured by GPM satellite in central Japan. *Tsukuba Geoenvironmental Sciences*, **15**, 1-11. (with Sawada, M. *** and Anzai, R. **)
- (2019): Precipitation systems interacted with surface conditions over the TP. *International workshop on cryosphere and water cycle observation-modeling integration over third pole*. Beijing, China. Abstract p27.
- Matsueda, M. (2019): Ocean observations to improve our understanding, modeling, and forecasting of subseasonal-to-seasonal variability. *Front. Mar. Sci.* doi:10.3389/fmars.2019.00427. (with Subramanian, A. ***, Balmaseda, M. A. ***, Chattopadhyay, R. ***, Centurioni, L. R. ***, Cornuelle, B. D. ***, DeMott, C. ***, Hamill, T. ***, Hendon, H. ***, Hoteit, I. ***, Flatau, M. ***, Fujii, Y. ***, Gille, S. T. ***, Kumar, A. ***, Lee, J. -H. ***, Lucas, D. ***, Mahadevan, A. ***, Nam, S. H. ***, Paturi, S. ***, Penny, S. G. ***, Rydbeck, A. ***, Sun, R. ***, Tandon, A. ***, Takaya, Y. ***, Todd, R. E. ***, Vitart, F. ***, Yuan, D. *** and Zhang, C. ***)
 - (2019): The Sensitivity of Euro-Atlantic Regimes to Model Horizontal Resolution *Geophys. Res. Lett.*, **46**, 7810-7818. doi:10.1029/2019GL082843. (with Strommen, K.***, Mavilia, I.**, Corti, S.**, Davini, P.**, von Hardenberg, J.**, Vidale, P. L.**, and R. Mizuta, R.**)
 - (2019): Assessing the predictability of heavy rainfall events in Japan in early July 2018 on medium-range timescales. *SOLA*, **15A**, 19-24. doi:10.2151/sola.15A-004. (with Matsunobu, T. **)
- (2019): Skill of Medium-range Reforecast for Summertime Extraordinary Arctic Cyclones in 1986-2016. *Polar science*, **20**, 107-116. doi:10.1016/j.polar.2019.02.003. (with Yamagami, A. **)
- Harada, M. (2019): Planktonic adaptive evolution to the sea surface temperature in the Neoproterozoic inferred from ancestral NDK of marine cyanobacteria. *Earth Planet. Sci. Lett.*, **522**, 98-106. (with Nagano, A.**, Yagi, S**, Furukawa, R.**, Yokobori, S.** and Yamagishi, A.**)

[f] Geomorphology

- Hattanji, T. (2019): Preface: Frontiers in geomorphology
 Rock weathering and landscape evolution. *Transactions, Japanese Geomorphological Union*, **40**, 201-202. (with Waragai, T.*** and Oguchi, C.T.**)
- (2019): Limestone weathering and doline

- evolution: A field experiment in the Akiyoshi-dai Plateau. *Transactions, Japanese Geomorphological Union*, **40**, 229-241. (with Nawata, A.***)
- (2019): Prior assessment of the linkage of biological cover, surface strength, and exfoliation: A case of the first gallery in Angkor Wat Temple, Cambodia. *Transactions, Japanese Geomorphological Union*, **40**, 309-323. (with Song, W.*** Waragai, T.** and Oguchi, C.T.**)
- years: From a perspective of geomorphology. *Kaga-ku*, **89**, 870-871. (*J*)
- (2020): Evaluation of shallow landslide potential using SHALSTAB and 1-m DEM: A case study of the Tsurugi-kawa drainage basin, Hofu City, Yamaguchi, Japan. *Regional Views*, **89**, 870-871. (*JE* with Tanaka, Y^{***}, Yakashita, K.**, Furuichi, T.** and Doshida, S.**)
- Matsuoka, N. (2019): A multi-method monitoring of timing, magnitude and origin of rockfall activity in the Japanese Alps. *Geomorphology*, **336**, 65-76.