

Won Young Lee

(address) 10-211 Physical Geography Lab, Department of Geography Education,
College of Education, Seoul National University
1 Gwanakgu Gwanakro Seoul 08826 Korea

(landline) +82-2-880-7724
(email) lemon752@naver.com

Education

Postdoctoral researcher, Dec. 2021 – Present, Geomorphology and Education Lab, Seoul National University, South Korea.

Postdoctoral researcher, July 2019 – Nov. 2021, Severe Storm Research Center, Ewha Womans University, South Korea.

Ph.D., 2019, Department of Social Studies Education (Human and Physical Geography), Ewha Womans University, South Korea.

- Ph.D. Thesis: A study on local rainfall thresholds for prediction of triggering landslides in Chuncheon city, Gangwon Province (in Korean with abstract in English). Advisor: Hyo Hyun Sung.

Feb. 2010 – Nov. 2011, The Seoul Institute, South Korea.

M.A., 2009, Department of Social Studies Education (Human and Physical Geography), Ewha Womans University South Korea.

B.A., 2007, Department of Social Studies (Geography education), Ewha Womans University, South Korea.

Research interest

- Precipitation and soil moisture conditions in relation to landslide occurrence
- Improving the spatial and temporal prediction of landslide-prone areas
- Land surface processes in relation to environmental conditions and weather events
- Geomorphological analysis of mountainous regions to read the landscape
- Climate change literacy and sustainability of natural heritage

Publications

Lee, W.Y., and Park, S.K., 2022, Development of an early warning system of rainfall-triggered landslides based on rainfall and soil moisture variation using Noah LSM, 18th Annual Meeting of the Asia Oceania Geosciences Society. April 2022, 141-143. https://doi.org/10.1142/9789811260100_0048

Harm, K., and Lee, W.Y., 2021, Exploring a Visualization-based Geography Teaching Strategy for Climate Change Education, Journal of the geomorphological association of Korea, 56(6), 657-673. <https://doi.org/10.22776/kgs.2021.56.6.657>

Lee, W.Y., Sung, H.H., and Park, S.K., 2021, The optimal rainfall thresholds and probabilistic rainfall conditions for a landslide early warning system for Chuncheon, Republic of Korea, Landslides, 5, 1721-1739. <https://doi.org/10.1007/s10346-020-01603-3>

Lee, W.Y., Sung, H.H., Ahn, S., and Park, S.K., 2020, Analysis and Validation of Geo-environmental Susceptibility for Landslide Occurrences Using Frequency Ratio and Evidential Belief Function - A Case for Landslides in Chuncheon in 2013 -, Journal of the geomorphological association of Korea, 27(1), 61-89. <https://doi.org/10.16968/JKGA.27.1.61>

Lee, W.Y., and Sung, H.H., 2018, Analysis of Rainfall Thresholds for Landslide Occurrence in Chuncheon, Gangwon Province, Journal of the Korean Geographical Society, 53, 669-689.

Lee, W.Y., and Sung, H.H., 2013, Sediments Distribution and Micro-topographical Landscape Changes of a Composite Mixed Beach -Padori Beach in Taean National Park-, Journal of the geomorphological association of Korea, 20(4), 1-13.

Park, J.K., Yim, S.Y., and Lee, W.Y., 2007, Hydrological Landscape of the Silk Road, Journal of Cultural and Historical Geography, 19, 57-68.

Conference presentations (recent 3 years)

Lee, W.Y., Chen, H., and Byun, J., 2022, Optimal valley bottom extraction methods for mountainous headwater catchments and geomorphic characteristics of the valley bottom, Proceedings of the Spring Meeting of the Association of Korean Geographers, May 28, 2022. (in Korean)

Lee, W.Y., and Byun, J.M., 2022, Comparing methods for delineating valley bottom at the mountain drainage: A case study of the Heungjeongcheon catchment in the upstream area of the Seo River, Proceedings of Winter Meeting of the geomorphological Association of Korea. (in Korean)

Lee, W.Y., Lee, Y., Lee, S.Y., Lim, S.J. and Park, S.G., 2021, Noah LSM-based soil moisture estimation and soil-related parameter change experiments for landslide early warning system development, Proceedings of the Autumn Meeting of KMS. (in Korean)

Lee, W.Y., and Park, S.G., 2021, Developing a Landslide Early Warning System based on Noah

LSM soil moisture: Application to Chuncheon case, Proceedings of Summer Meeting of the geomorphological association of Korea. (in Korean)

Lee, W.Y., and Park, S.G., 2021, Development of an Early Warning System of rainfall-triggered landslides based on rainfall and soil moisture variation using Noah LSM, Proceedings of the 18th Annual Meeting of the Asia Oceania Geosciences Society (AOGS 2021), August 1-6, 2021, Singapore

Lee, W.Y., and Park, S.G., 2021, Development of rainfall-based Landslide prediction model using decision tree and random forest and comparison of thresholds for landslide occurrence according to the rainfall events in Chuncheon, Proceedings of Winter Meeting of the geomorphological association of Korea. (in Korean)

Lee, W.Y., and Park, S.G., 2020, Analysis of changes in snow cover distribution in South Korea's heavy snowfall region (Pyeongchang, Jeongseon region) using Sentinel-2 satellite imagery, Proceedings of the second half of 2020 meeting of the Korean Society of climate change research (in Korean)

Lee, W.Y., Lee, Y., Lee, S.Y., Lim, S.J., and Park, S.G., 2020, Comparison of parameterization for snow-related physical processes among land surface models, Proceedings of the Autumn Meeting of KMS. (in Korean)

Lee, W.Y., and Park, S.G., 2019, Analysis of seasonal and annual changes in latent heat flux based on Noah LSM using Automated Agriculture Observing System data and ERA-LAND data, Proceedings of the Autumn Meeting of KMS. (in Korean)

Lee, W.Y., Sung, H.H., and Park, S.K., 2019, Analysis and Validation of Environmental Susceptibility for Shallow Landslides Using Frequency Ratio and Evidential Belief Function in Chuncheon in 2013, Proceedings of Summer Meeting of the geomorphological association of Korea. (in Korean)

Lee, W.Y., Sung, H.H., 2019, Analysis of the probability of landslide occurrence using Bayesian methods - with a focus on the city of Chuncheon, Gangwon Province -, Annual meeting of the Korean Geographical Society. (in Korean)

Lee, W.Y., Sung, H.H., 2019, An Integrated Approach of Local Thresholds Study and Environmental Susceptibility Analysis to Improved Hazard Prediction: A Study on Local Rainfall Thresholds for Prediction of Triggering Landslides, Proceedings of Winter Meeting of the geomorphological association of Korea. (in Korean)