Welcome to the world of land-atmosphere interaction in the mountains

Abstract

Have you ever imagined that mountain weather is strongly coupled with topography and land cover conditions? This book aims to introduce the cloud and precipitation activities in mountainous areas by means of land–atmosphere interaction for the non-professionals of meteorology who love the nature of mountains. The main stages are the Nepal Himalayas, Tibetan Plateau, and central Japan, with some topics regarding Mt. Kilimanjaro (Tanzania), Lesotho, and Yunnan (China). All of the content is based on the author's real experiences with international projects or case studies with students, and they are described as travel stories with explanations of the basic physical/geographical processes. References are cited as much as possible for readers who want to explore more specific fields. The texts are in Japanese; however, I hope readers can image the exquisite nature of mountain-atmosphere interaction by observing the pictures and figures. Perhaps it will inspire you to learn more as a professional physical geographer.

¹⁾ Ueno K., and Nakileza B., 2022: Atmospheric Envelopes and Glacial Retreat. In: Sarmiento, F.O. (eds) Montology Palimpsest. Montology, vol 1. Springer, Cham. 506 pp. https://doi.org/10.1007/978-3-031-13298-8 10