Geomorphic development of landslides and linear depressions on Mount Amari and Mount Sentoboshi during the latest Quarternary period in central Japan

*Tomoko Kozuka[1], Yoshihiko Kariya[2]

1. Undergraduate, Senshu University , 2. Senshu University

Features of gravitational rock slope deformation (sagging) and wide variety of landslide are common in the area of Mount Amari (1740 m ASL) and Mount Sentoboshi (2139 m ASL) in Yamanashi Prefecture, central Japan. However, the information about distribution, lithological characteristics, and geological dates of those features is still quite limited. We thus attempted to prepare a geomorphological map and to describe field-based geological records as well as to obtain chronological constraints through tephras and ^{14}C ages. Some landslide cases could be back to the middle Pleistocene epoch (~100 ka or before) at least but others had been formed in the late Pleistocene and the Holocene epochs. Whereas the historical development of gravitational depressions are not always elucidated, some cases were completed in the late Pleistocene. The assumed basic factors of landsliding and slope deformation are of unique geological and geomorphological settings of the study area; well-fractured marine and non-marine sedimentary rocks and high-relief topographic forms. Although resolving the causal factors for progressive slope deformation and landsliding are unsettled, paleoseismic events generated from the active faults in the piedmont areas of the study area are quite possible.

Keywords: On-Pm1 tephra, Linear depression, Lacustrine sediments, Deep seated gravitational slope deformation

