

Micro - Landform Mapping and Applications in Hilly Area Using LIDAR Data

BORJIGIN, Habura^{1*} ; GOTO, Shintaro²

¹National Institute for Environmental Studies Center for Regional Environmental Research, ²Rissho University Department of Environmental Systems Faculty of GEO-Environmental Science

The objective of this study is to develop the information to be provided for natural regeneration by investigating the relationship between Micro-Landform and vegetation in hilly area of Higashi-matsuyama City in Saitama Pref. The Micro-Landform was classified based on the conversion line of the slope angle derived from DEM (digital elevation model) generated from LIDAR (Laser Imaging Detection And Ranging). Furthermore, we summarized the classification situation of each Micro-Landform by every tree measurement. Finally, the relationship between vegetation and Micro-Landform in the study area was detected by analyzing the relationship between the summarized situation of Micro-Landform and the woody life type corresponding to the Micro-Landform classification using TWINSpan.

Keywords: LIDAR data, Micro-Landform, Vegetation, TWINSpan