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## On the Instability of Large Slopes in the Upstream of Wu River, Taiwan

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Considering the existence of various types of landslides (shallow and deep-seated) and the importance of protection targets (the landslide might affect a residential area, cut a road, isolate a village, etc.), this study aims to analyze the landslide susceptibility along the Lixing Industrial Road, i.e. Nantou County Road # 89, in the upstream of Wu River. Focusing on the selected typical large scale landslides, the data and information of the landslides were collected from the field and the government (including the local government, the Soil and Water Conservation Bureau, and the highway agencies). Based on the data of Li-DAR and the information from boreholes, the temporal behavior and the complex mechanism of large scale landslides were analyzed. To assess the spatial hazard of the landslides, probabilistic analysis was applied. The study of the landslide mechanism can help to understand the behavior of landslides in similar geologic conditions, and the results of hazard analysis can be applied for risk prevention and management in the study area.