A Study On Modeling Landslide Dynamics Using Cellular Automata And The Minimization Algorithm

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In a country like the Philippines, landslides and other types of debris flow have disastrous effects on the economy, the infrastructure, and the lives of citizens. Thus, it is imperative that the dynamics behind landslides and other types of debris flow are understood. In this study, we used a cellular automata-based program and the minimization algorithm to investigate the dynamics of landslides and other debris flow. The study is divided into two parts: the implementation of the minimization algorithm including the computation of debris flow, and extending the simulation of this debris flow for a larger neighborhood – including other factors such as relaxation times and kinetic energies.