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ANALYSIS OF LANDSLIDES IN PERU BASED ON SATELLITE IMAGES TO IDENTIFY DANGER ZONES

Abstract

In Peru, many families are affected by landslides, whether due to an earthquake, heavy rains, the existence of wetlands, or for other reasons. But the primary cause of families being affected by these facts is that many villages settle and build their homes in areas of landslide risk, mainly due to ignorance that these areas were causes of rivers in earlier times. Due to this situation, in this work, we propose the use of satellite images, both optical and radar for the identification of risk areas. The idea is to use image processing techniques based on the calculation of indices, change detection, temporal space analysis to identify zones with the possibility of a landslide in Peruvian regions. With the obtained results, it is expected that the inhabitants become aware of the hazard they are in and that the authorities can make the best decisions.