

# REMOTE SENSING AND GEOGRAPHIC INFORMATION SYSTEM APPLICATION FOR FLASH FLOOD LEVEL CLASSIFICATION MAPPING IN VIETNAM

**Pham Thi Ngoc Nhung**  
nnhungsc@gmail.com

## ABSTRACT

Flash flooding which is a kind of natural disaster has increasingly occurred in the mountainous areas in the country in the world, especially in river basins located in the tropical climate zone influenced by moonsoon and storms. Flash floods bring great damages, not only directly on people and property but also have large consequences in habitat destruction. Therefore the world and Viet Nam have come to understand the importance and urgency of the flood forecasting purposes to reduce the consequences of this disaster caused.

In recent years, with information technology's development in the world, remote sensing (RS) technology and geographic information systems (GIS) have been developed from different scientific disciplines and application on the field. There has been a long-term interest in merging these two technologies, because remote sensing provides relatively accurate data on the status of land use, terrain elements, geology, vegetation cover...then linked to GIS. GIS is not only use to represent and process data but also to draw the object class on geographical maps.

This article is an introduction to integrate solutions of RS and GIS to establish flash flood level classification map.

**KEY WORDS:** Flash flood, GIS, RS, level classification