

Defining fire issues in Malaysia and Indonesia through recent satellite technology: a review on MODIS fire detection and burned mapping

ABSTRACT

Forest fire, a global phenomenon, often leads to environmental degradation such as habitat damage and trans-boundary haze. In response to growing concerns over the burning of peat swamp forests, researchers have begun developing methods of detecting and mapping forest fire. In addition, substantial progress has been made in forest planning and fire management, as well as in developing fire detection method using modeling techniques. This paper reviews current forest fire detection and burned area mapping methods that have been applied and studied in most affected area in Malaysia and Indonesia. This paper is also discussing other methods of remote sensing in forest fire detection and burned area mapping. Future research of using MODIS remote sensing technology in forest fire detection and mapping in both countries were also deeply described.

Keyword: MODIS product; Tropical forest; Peat swamp; Forest fire; Remote sensing; GIS