# DETECTION OF FREQUENTLY-BURN LOCATIONS USING MULTI-TEMPORAL TERRA/AQUA MODIS FIRE PRODUCT (MOD14) IN SOUTHEAST ASIA

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**Abstract:** Wildfire is natural and man-made disaster that relates to global warming and climate change and prominent disaster that destroys natural resources, and cause enormous danger to human life and property. The study on the spatial and temporal distribution of wildfire is plays important role for scientists to understand the wild fire occurrence, spatial and temporal distribution patterns and behavior. In the past, many researchers usually study on the pattern of wildfire and open-space burning according to the daily number of active fire detected by earth observation satellites for a particular area at the time of satellite over pass. However, there is no study that focused on the active fire that frequently occurred at the same location for a given period of time. Based on this reason, in this paper, the authors has focused on the study of frequently-burn locations in Southeast Asia, where the number of active fire is enormous during the burning season in January to April yearly. The NASA active fire product (MOD14) data were downloaded from FIRMS to apply to the spatial and statistical analysis of frequently active fire occurrence during May 2001-May 2013. The result shows that the highest number of burning frequency is 6 and 7 times within the study period. These numbers show the burning frequency are located in many areas differentiated by topographic elevation and land use types, and can be identified by administrative units ranging from provinces to sub-districts. The obtained information on frequently-burn locations in the province would be useful to identify the repeat burning activity by the local people occurred in the same location and allows the forestry and agricultural officers understand the wildfire distribution pattern, which is linked to the agricultural and economical characteristics of the local people.

Keyword: Wildfire, Active Fire, Frequently-Burn Location, MODIS, Multi-Temporal, Southeast Asia