Synergetic use of multi-satellite remote sensing to detect forest fire

Satellite remote sensing is primary data source for monitoring forest fire because it provides spatiotemporal continuous products. Each satellite has own approach to detect forest fire depending on the characteristics of satellite resolution (spatial, temporal and spectral). Therefore, synergetic use of multi-satellite remote sensing data will be useful to identify the locations of forest fire and to detect damaged area. Satellite-based forest fire detection can be categorized into two types, active fires and post-fire monitoring. Forest fires in South Korea have happened on a small-scale. In this study, the damage of the small-scale forest fire was investigated using various satellite data which have different characteristics. The usability of each satellite was analyzed by comparing the characteristics that come from 1) spatial, 2) temporal, and 3) spectral resolution differences. This study also suggested the synergetic use of multi-satellite to detect forest fire.