BIOMASS BURNING SURVEILLANCE BY MIR DATA PROCESSING

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Abstract: Remote sensing using satellite imagery has high utilization of global change research because it can constant surveillance for large area, and acquire various information according to spectral characteristic. In advanced countries have already been developed and operated the various fire detection techniques and the wildfire surveillance system. Surveillance technique of wildfire in Korea focus on the prediction rather than early detection of the active fire, and there is a problem that the first response is slow if do not have prompt information by witnesses of wildfire occurrence. In case of foreign, wildfire detection techniques have reached the stabilization phase of technology about 10 years ago, and various researches have been proceeded also recently to reduce wildfire damage. In this research, I had developed to detection technique by MIR data processing suitable to object of high-temperature such as biomass burning. MIR channel imagery of BIRD developed at DLR, was used in this research, and performed false alarm rejection to improve the biomass burning detection accuracy use to atmospheric correction. The wildfire detection technique used in this research is expected to be available to conduct in site of fire extinguish, because possible of biomass burning early detection in that base on MIR.

KEY WORDS: Biomass Burning, Wildfire, MIR, Early Detection, BIRD