VEGETATION RECOVERY DETECTION FROM FOREST FIRE USING REMOTE SENSING TECHNIQUES

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In the most name of ALLAH S.W.T

Most Gracious and Most Merciful

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ABSTRACT

This paper presents the detection of forest fire using mostly of remote sensing techniques. The scope of this project involves software implementations. The data from Malaysia Meteorolgy Department (MMD) are been used to relate on the humidity and temperature on the detection of the recovery. The data collection is in between 2005 until 2008 consecutively for 365 days and been recorded twice daily. MATLAB software will be used to analysed the data by ANOVA approximation approach in order to proved the relation of the images and the humidity and temperature. Station of collection data by MMD at Tanjong Karang, Selangor is chosen. By using the Normalize Difference Vegetation Index (NDVI) to estimate the recovery of the vegetation and Supervised Classification to investigate and observe the detection of the recovery through time. This method will be integrated with the classification on classify the stage of burned and the recovery of vegetation. The Raja Muda Reserve Forest situated in Batang Berjutai Kuala Selangor. In addition the area of research is located at the pit swamp areas. The area had been a tragedy in 2005 and 2007. The image of the area provided by Remote Sensing Agency will be extracted and further process with Erdas Imagine Software. The extracted and processed image will be compare with the two image of 2005 and 2009. The image supposed to observe the vegetation growth in the two images and get the index of the growth to compare and relate the detection of vegetation growth. Correlation approach is used to relate on the both result and proved the relationship of the model of set of images and the data on humidity and temperature.

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