ABSTRAK

Forest has many function that are as timber, water regulator, shelter and growth of animal life, tourist attractions, and others. Forest is a natural resource that should always be preserved. If deforestation is still ongoing without any reforestation program / reforestation, it will lead to disruption of forest ecosystems and can result in serious damage to environment. This study utilized remote sensing technology monitored forest. Monitoring is doing in the rainy season and dry season. The rainy season and dry season occur based on rainfall data which extracted from the data Tropical Rainfall Measurement Mission (TRMM) 2012 in Java.

Identification of forest’s pixel is based on the value of Normalized Difference Vegetation Index (NDVI). The result showed that in 2012 the rainy season on the island of Java occur in January to May, November and December and the dry season occur in June to October. The range of Terra MODIS is longer than the NOAA AVHRR 19 in the identification of the forest’s pixel so if the range is separated, it allowing the number of classes are more diverse vegetation for Terra MODIS.

In the rainy season, forest’s area in Java are 63004.28 km² acquired from Terra MODIS and NOAA AVHRR 19 obtained 40821.66 km². In the dry season, forest area in Java are 55366.37 km² acquired from Terra MODIS and NOAA AVHRR 19 obtained 59918.35 km². Forest’s area decreased in dry season because there is a forest vegetation which renders its leaves during the dry season so that the canopy cover is reduced which decrease NDVI values. NOAA AVHRR 19 occurred otherwise. This anomaly is expected due to the influence of cloud, which result in lower NDVI values during the rainy season. Then by using multitemporal data MODIS in the rainy season can be obtained forest’s pixel without farm so we can get forest’s map with great accuracy.

Keyword: Rainfall, forests, NDVI, multitemporal
“Halamaninisengajadikosongkan”