Atmospheric Effects Reduction on Landsat MSS Data

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Abstrak

The atmospheric effects reduction in this study which covers path radiance effect decrement and ground reflectivity extraction of Landsat MSS Data.

When radiation travels through the atmosphere, energy is attenuated through scattering and absorption, an enhanced due to atmospheric emission and path radiance. Ground reflected radiance, from which information is extracted for remote sensing application,
is altered by the atmosphere when it reaches the satellite. Besides that, radiance reflected by the background area surrounding the target may also reach the
satellite. Therefore, the effects of atmosphere on Landsat data must be reduced, before data processing for any purposes.

The effective reflectivity which is observed from the satellite can be computed as a function of ground reflectivity. Relation between the effective reflectivity and ground reflectivity is linear approximately.

Land cover classification which is processed by Maximum Likelihood method is used in this study, in order to evaluate the atmospheric effects reduction method.