

▪ **Topic :**

Remote Sensing over Land

▪ **Title :**

A Study on Inter-relationship of Vegetation Indices using IKONOS and ETM+ imagery

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▪ **Abstract :**

There is an increasing need to use data from different sensors in order to maximize the chances of obtaining a cloud-free image and to meet timely requirements for information.

However, the use of data from multiple sensor systems is depending on comprehensive relationships between sensors of different types. Indeed, a study of inter-sensor relationships is well advanced in the effective use of remotely sensed data from multiple sensors.

This paper is concerned with relationships between sensors of different types for vegetation indices (VI). The study was conducted using IKONOS and ETM+ images of three regions. For each region, IKONOS and ETM+ image of the same or about the same dates were acquired. The ETM+ images were resampled in order to make them coincide with the pixel sizes of IKONOS. VI is obtained by DN, radiance, reflectance of images and is analyzed.

In the result, the relational equations can be used to compute or interpret VI of one sensor using the VI of another sensor.

▪ **Keyword :** sensor, vegetation indices, inter-relationship

▪ I hope that this paper is selected **poster** paper. Thank you.