Exercise #5E

Image Classification

(Unsupervised)

Objective

- Learn the concept of classification of an image.
- Generate clusters using an unsupervised classification approach (ISODATA).

Create a classified image using the ISODATA unsupervised classification

In this exercise you will follow an ERDAS Imagine tutorial to create a thematic raster layer for the Landsat TM image of your own (<yourfile.img>). Follow the instructions on pages 125 - 132 of the Essentials Tour Guide .pdf file (page number 101 – 108 on the printed book) to create the file <yourfile_isodata.img>. Now you have the original raster image file (<yourfile.img>) and a classified one (<yourfile_isodata.img>) with 10 (or more) classes. View these two images in one viewer and use the utility->flicker->manual setting to flash the thematic layers over the original image. You can also bring up the original image in other bands (e.g. 321, which is closer to true color; and 432, which is false color) and overlay the thematic image.

By varying the number of classes see if you can obtain a close correspondence between the unsupervised classification and your own (supervised) one.

Turn in a screen dump of your unsupervised classification.

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