How to Display a Landsat 7 Image in ArcView 3.x

These instructions explain how to display a multi-band image in ArcView 3.x. The example used here is a 4-band TIFF image with the following correspondence:

TIFF	LANDSAT
Band 1	Band 8 (panchromatic)
Band 2	Band 7 (mid infrared)
Band 3	Band 4 (near infrared)
Band 4	Band 2 (green)

You need to select the appropriate band combination for an RGB colour composite multiband image, or a panchromatic (black and white) single band image. Consult any metadata that may come with your image file so you will know which TIFF band represents which Landsat 7 band.

ORIGINAL DATA

landsat7fuse742.tif A multiband TIFF image subset from a Landsat 7 scene

Add the data to a View in ArcView 3.2:

- 1. In the View, click the ADD DATA button
- 2. Set the Data Source Type to "Image Data Source"
- 3. Navigate to locate the landsat7fuse742.tif image and select it
- 4. Click OK
- 5. Turn the theme on

Modify the image legend for a multiband display:

Refer to FIGURE 1 below...

- 6. In the table of contents, double click on the landsat7fuse742.tif theme to access its Image Legend Editor
- 7. While the Multi-band option button is selected, choose Band 2, Band 3, and Band 4 beside the red, green, and blue diamond symbols respectively
- 8. Click on the LINEAR button
- 9. Click and drag the red, green, and blue Linear Lookup graph lines to brighten or darken contrast
- 10. Click APPLY and close the Linear Lookup dialog
- 11. Click APPLY and close the Image Legend Editor

29 April 2005

UofA Biological Sciences – GIS



FIGURE 1. Multiband image legend editor – to display Landsat's RGB composite.

Modify the image legend for a single band display:

Refer to FIGURE 2 below...

- 12. To display the panchromatic band, double click to access the Image Legend Editor
- 13. Select the Single Band option button
- 14. Choose Band 1
- 15. Click on the LINEAR button and adjust as desired
- 16. Click APPLY and close each dialog as before

29 April 2005

UofA Biological Sciences – GIS



FIGURE 2. Single band image legend editor – to display Landsat's panchromatic data.