

## Recoding a Classified Image

There are times when you may want to recode, or renumber, a classified image. You may have created an unsupervised classification with 20 classes. Now that you have studied the scene, you would like to combine the original 20 classes into 6 new classes. For example, classes 3, 4, and 7 may all be deciduous forest and you now plan to have a single deciduous class number 2 for the scene.

Perhaps the easiest way to recode a classified image is to create a special layer stack with a separate "Classification Layer" for each new output code. For the example above, you would create 6 layers (see figure 1). For each layer you will enter a formula that will combine and/or reassign class numbers. If the value of the input pixel matches a class to be assigned to this layer, then assign it the new number, otherwise make it a null value. See figure 2 for the formula for the example described above. You repeat this process for each layer, modifying the formula as appropriate. Once you have created a Classification Layer for each output value, with appropriate formulas, you will save this file as a new ERMapper raster dataset.

**NOTE: the actual output values are assigned by position in the layer stack. The last layer is assigned a new value of 1; the second to the last layer is assigned a value of 2, etc.**

The new output file will contain information for the new classes you have just created as well as information for the original classes (14 in this example). The final step in this process is to modify the header file by removing the class information for the original 14 classes. Make a backup copy of the header file (the **.ers** file). Now you can edit the header file with any text editor such as Notepad or WordPad. Once you have successfully modified the header file, generate statistics and add colors and labels to your new recoded file.

An algorithm has been prepared that will create a new file using six Classification Layers. You can load this algorithm and then save it in your own directory. After saving it, change the input file to your own classified image. You can add new layers as needed and modify the formulas to meet your specific requirements. The example algorithm is located at:

**N:\ERM\_files\Recode\_Classes.alg**

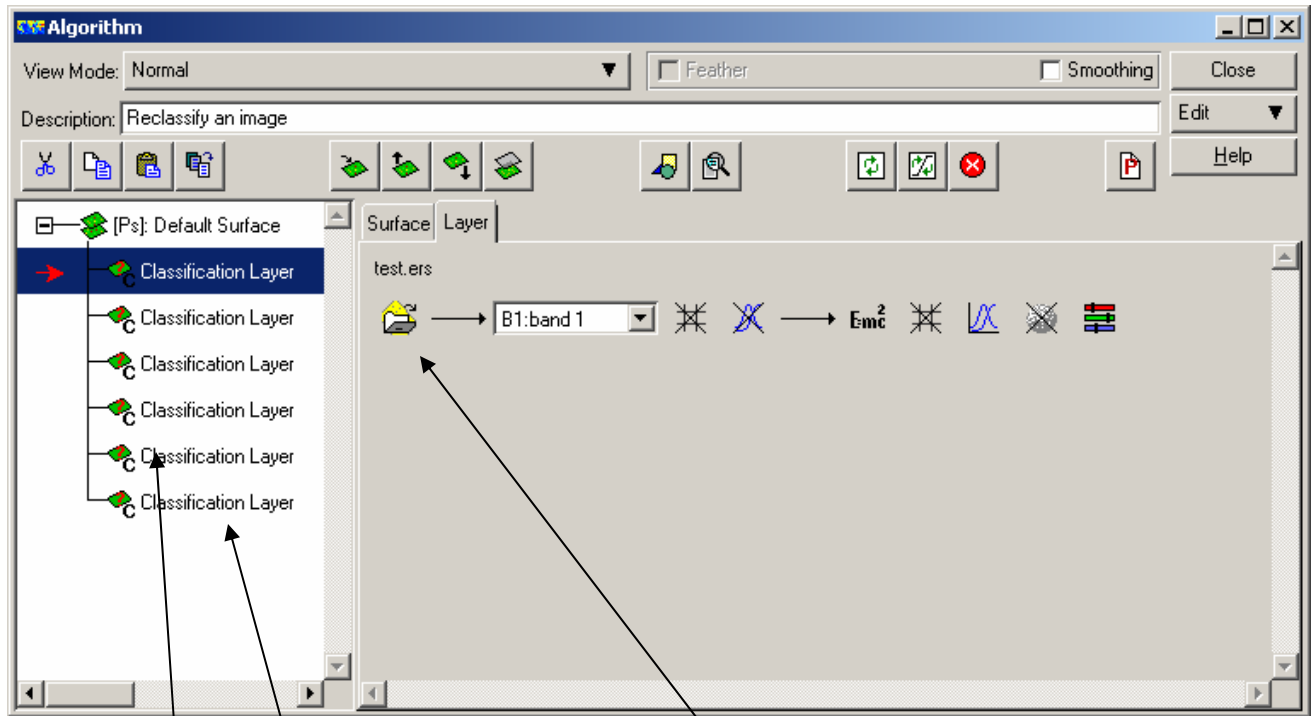


Figure 1

- For new class 1  
- For new class 2  
Etc.

Select your own file here

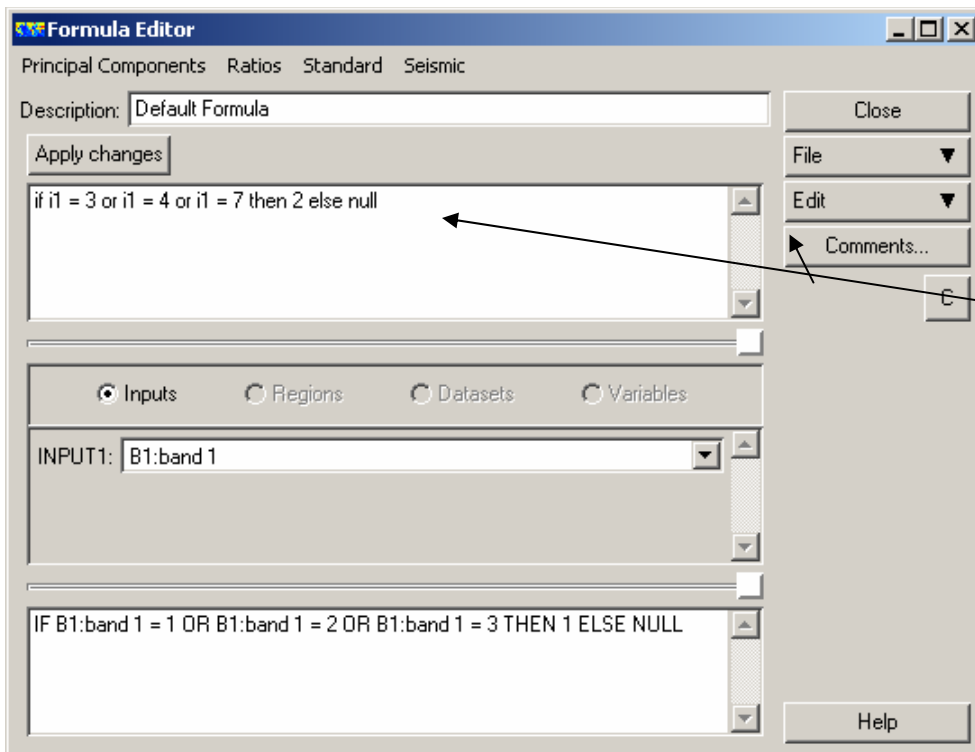


Figure 2

Adjust this formula for each layer