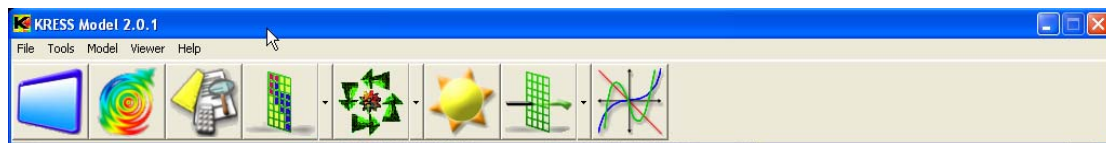
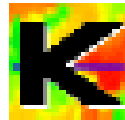


# Exercise 9

## Map Algebra

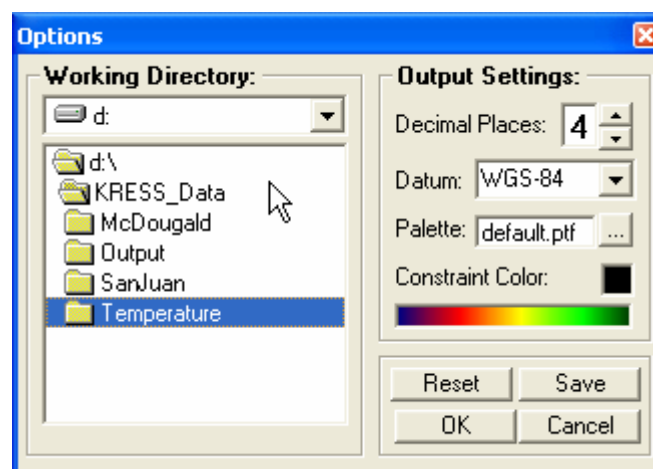
### Step 1: Starting the KRESS Program

To launch the KRESS model, double click on the icon.



### Step 2: Setting the Working Directory and Output Settings

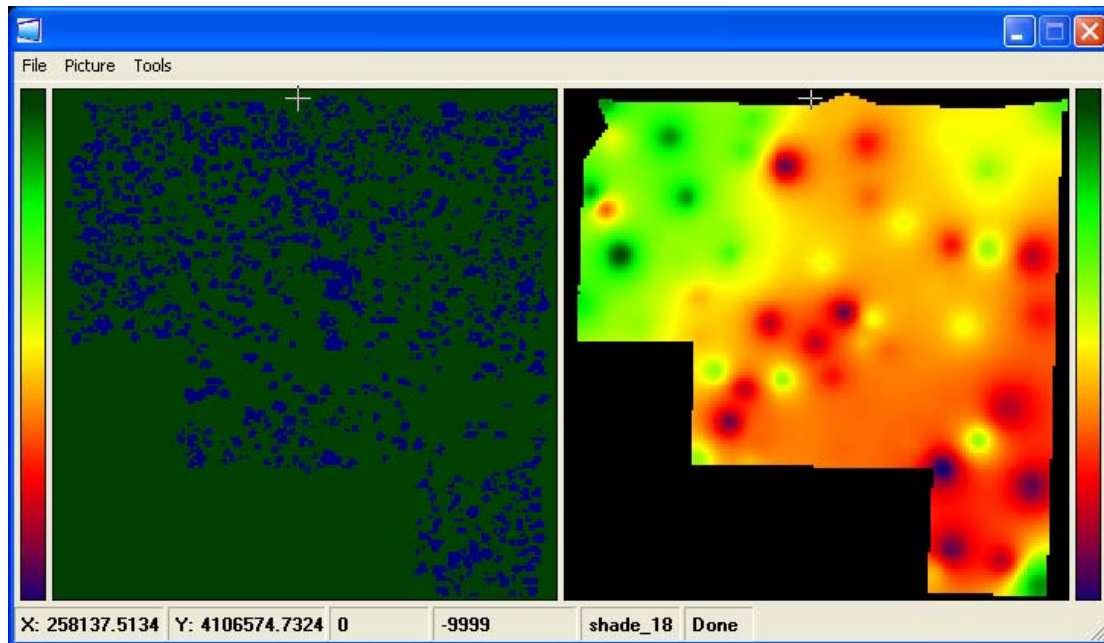
If you have not already done so, go to “Global Settings” under the “File” menu to set your working directory. For these examples, set the working directory as Kress\_Data. The Datum is WGS-84, and four decimal places should be adequate. These examples will be done using the default palette and a black constraint color. Once all of these settings have been set, the “Options” form should look like the graphic below.



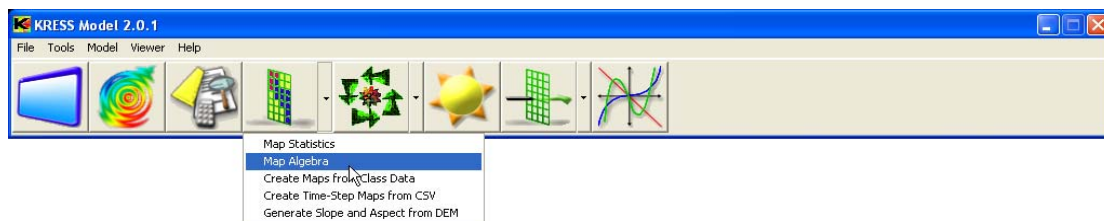
The data set used in this exercise was collected from the East pasture of the McDougald ranch in the California foothills. The shade map was created by digitizing on screen shaded area from tree cover during the summer trial. The temperature maps were generated by interpolating the thermistor data. Temperature was recorded at 15' interval during the whole summer trial.

## Step 4: Viewing Maps Using KRESS Viewer

Before we begin adjusting the values of the maps, first open the two maps to see what they look like. The two maps we will be using in this example are in the Kress\_Data/Temperature. The two files will be the shade\_18.asc and open\_18.asc files. They should look like this when opened in the KRESS Viewer:

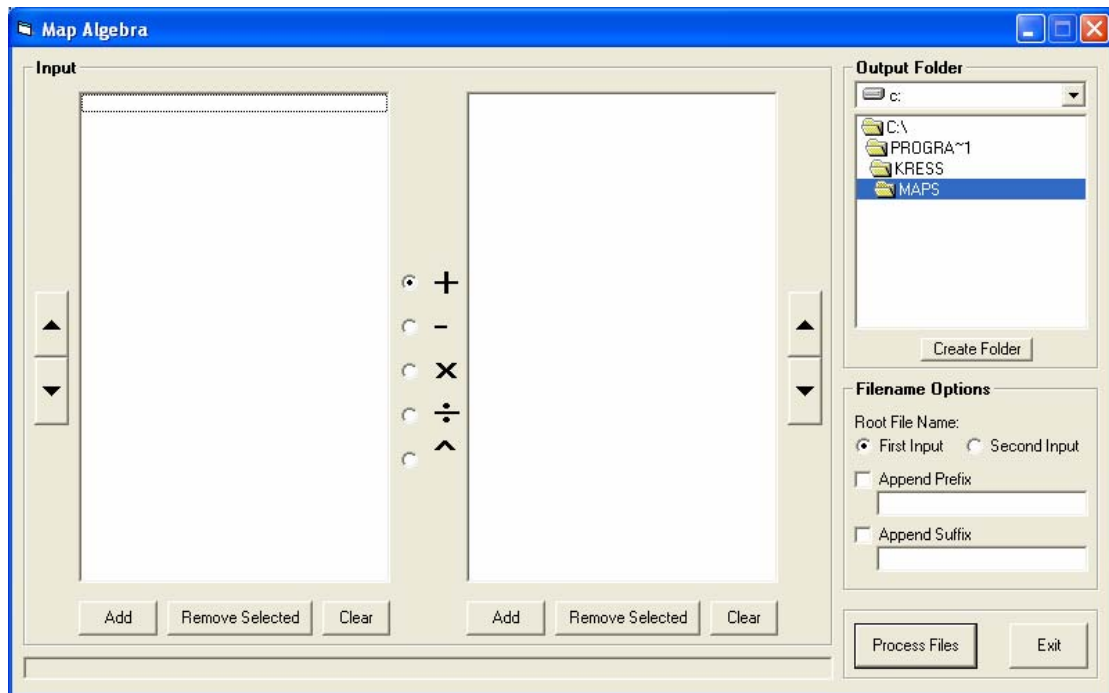


## Step 3: Opening Map Algebra Module



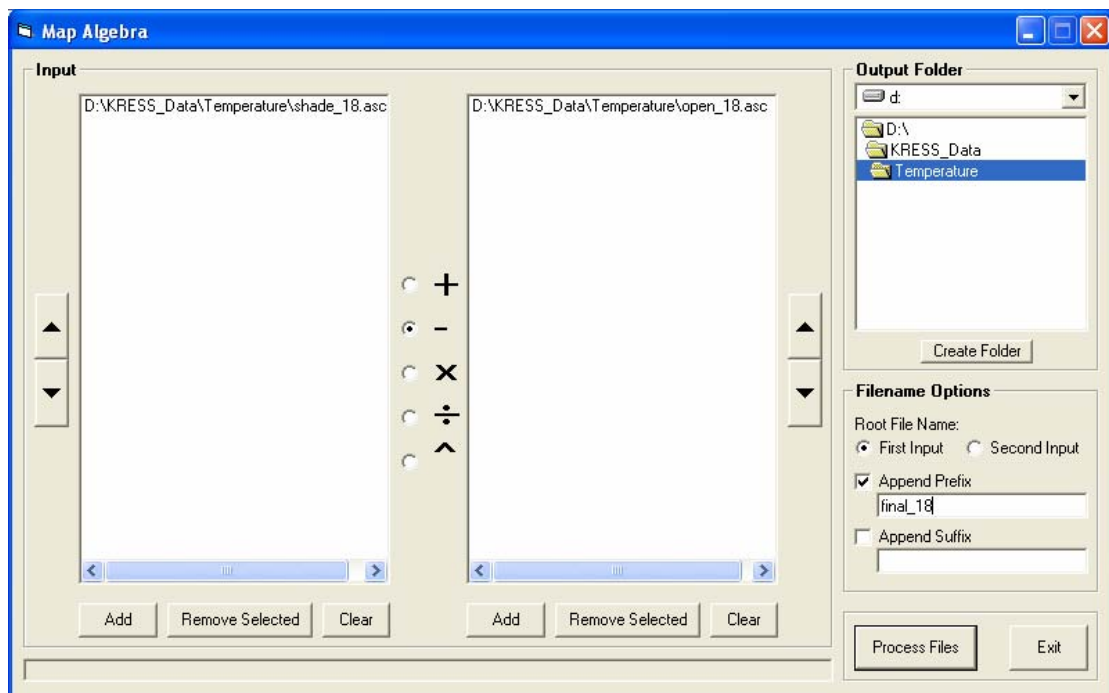
The Map Algebra form can be reached by clicking "Map Algebra" on the "Tools" menu or by clicking the down arrow next to the "Maps" icon and selecting "Map Algebra".

The form will open and look like this:

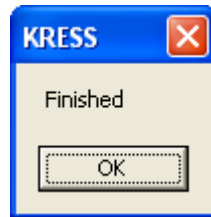


### Step 5: Performing Map Algebra

Now, in the Map Algebra form, click the “Add” button under the left column and browse for the shade\_18.asc file and hit “OK”. Then click the “Add” button under the right column and browse for the open\_18.asc file, then click “OK”. Append a prefix to the output. Your form should look like this:



Click the “Process Files” button. The progress bar at the bottom of the screen will show the progress. When the program is finished running, this will pop up:



### Step 6: Viewing Output in the KRESS Viewer

You can open your new file in the Kress viewer. It should look like this (you will have to let the viewer scale it for viewing):

