Laura Ekstrand (Idmil@iastate.edu), May 10, 2014

There are two executables in the bin folder:

- mantis.exe is the main application which takes a single Javascript file as an argument. commandline/Investigator.js is the file to input in order to open the main comparison GUI. There is also shortcut, Mantis Investigator, which can be double-clicked to run the main GUI. Don't double-click this exe because you will get no output. To use Mantis, navigate to its folder (bin) using the command prompt (All Programs>Accessories>Command Prompt). Type "mantis [filename]" (without the quotes) at the prompt. Some sample scripts are provided in the commandline folder (including Investigator.js).
- maskEditor.exe is the application for cleaning .mt files. You can double-click this to open the Mask Editor.

There are three tasks you will want to perform with Mantis:

1. **Importing .al3d files.** Mantis works with its own format .mt. Due to time constraints, the only method of conversion to .mt is currently using a Javascript file. (Fortunately, you shouldn't have to do this very often right now.) commandline/cleanplate.js and commandline/cleantip.js provide an example of performing this process. Provide your Javascript file to mantis at the command prompt. I recommend using notepad++ to edit your Javascript file because it has syntax highlighting. Your file should look like this for a simple conversion:

```
var path = [your path goes here in double quotes];
var file = importRangeImage(path + "dem.al3d", path +
"texture.bmp");
file.save(path + [your mt name goes here in double quotes])
```

- 2. Cleaning the data. This is super simple. Just open Mask Editor and then open your .mt file using the File>Open dialog. Draw over the parts you want to throw away; for a whole region, just draw an "X" through it. Mask Editor will throw away everything but the biggest non-coral-colored blob. Note that the data is still in the file; it's just hidden for the sake of comparison. If you ever want to recover the data you cut off, just use Mask Editor's eraser. When you're done, go to File>Save and choose a place to save your data. The cleaning dialog will then pop up. Click the button Tip for the tip settings and Mark for the mark settings. Advanced users can click the checkboxes and radio buttons to try other cleaning options.
- 3. **Performing a comparison.** This is also pretty straightforward. Double-click on the Mantis Investigator shortcut. Choose either Open Tip or Open Mark and navigate to an mt file. Once you have whatever two data windows open that you want to compare, you can't open any more of them. For a tip, type an angle (I recommend a y-axis angle of between 30 and 90 degrees) and press the Make Mark button. Wait to get a mark. For a plate, double-click where you want your selection. Click compare to get a T1 value. To change advanced stat settings, go to Tools>Stat Settings Dialog. To compare more files, close at least of one the two you have open using the X button in the top right corner of the tip/mark subwindow.