CountStarsInFolder.ijm By Leigh Henderson

Purpose: This ImageJ macro counts the stars in multiple images of the night time sky.

Instructions for use:

- 1. Save all images into one folder (aka. a "directory"). Do not place any other files into this folder.
- 2. Plugins > Macros > Open. Open CountStarsInFolder.ijm.
- 3. Click on the .ijm window. Macros > Run macro.
- 4. A dialogue box will open. Select the folder in which your images are stored.
- 5. A second dialogue box will open. Select a different folder in which thresholded images will be placed.
- 6. The macro will run. Star counts will appear in the Summary window.

```
dirInput = getDirectory("Choose Directory");
dirOutput = getDirectory("Choose Directory");
list = getFileList(dirInput);
setBatchMode(true);
for (i=0;i< list.length;i++) {
  open(dirInput+ list[i]);
  run("8-bit");
  setAutoThreshold("Intermodes dark");
  //run("Threshold...");
  //setThreshold(123, 255);
  setOption("BlackBackground", false);
  run("Convert to Mask");
 run("Analyze Particles...", " show=Outlines exclude clear summarize");
  saveAs("Jpeg", dirOutput + File.nameWithoutExtension + "_Threshold");
  close();
}
```